



A PENSION TRUST FUND OF  
THE STATE OF ARKANSAS  
MARK WHITE, EXECUTIVE DIRECTOR

## Annual Comprehensive Financial Report

# 2023





Prepared by the Staff of  
**ARKANSAS TEACHER RETIREMENT SYSTEM**

1400 West Third Street • Little Rock, AR 72201  
501.682.1517 • [artrs.gov](http://artrs.gov)

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# Introduction



March 1, 2024

Board of Trustees  
Arkansas Teacher Retirement System  
1400 West Third  
Little Rock, AR 72201

The Arkansas Teacher Retirement System (the "System" or ATRS) is pleased to submit this Annual Comprehensive Financial Report (ACFR) for the fiscal year ended June 30, 2023. The ATRS ACFR provides comprehensive information on the retirement plan that ATRS administers. Responsibility for both the accuracy of the data and the completeness and fairness of presentation rests with the System. To the best of the System's knowledge and belief, the enclosed data is accurate in all material respects and presents fairly the System's financial status and changes in the financial condition.

The 2023 Financial Report is presented in five sections. Contents are summarized below (a detailed Table of Contents may be found on Page 2).

#### **Introductory Section:**

This section contains the transmittal letter, the membership of the Board of Trustees, and an organizational chart.

#### **Financial Section:**

This section provides the System's financial statements, required supplementary information, and supporting schedules with additional information about the System's expenses.

#### **Investment Section:**

This section includes the investment consultant's report, investment policies, asset allocation, and investment results.

#### **Actuarial Section:**

This section provides the certification letter from the independent actuary, supporting schedules, and a summary of plan provisions.

#### **Statistical Section:**

This section presents schedules and tables of comparative data related to the membership, active and retired, of the System.

On March 17, 1937, ATRS was established by Act 266 of 1937. ATRS is a combination contributory/noncontributory retirement system governed by Arkansas retirement law, Title 24 of the Arkansas Code. ATRS is one of five state-supported retirement systems in Arkansas and provides retirement, disability, and survivor benefits to employees of Arkansas public schools and educationally related public agencies. The System has 338 participating employers.

#### **Investments**

ATRS has structured a diversified portfolio that has allocations to equity markets, fixed income, private equity, real assets, and alternative investments. Investing in multiple asset classes not only allows the System to benefit from equity advances, but also offers protection during down markets. The approach is not static and changes in accordance with the changing investment environment. For example, investments in alternative classes continue to be added, such as an allocation to a mortgage servicing rights strategy. These target allocation alignments are designed to further stabilize the portfolio and match the ATRS assets to its liabilities.

Over the long-term, ATRS' investment approach has proved beneficial and is designed to weather investment market volatility. ATRS maintains a roster of compelling investment managers, and new opportunities that will benefit the System are being considered. ATRS still uses indexing to level out risk. A focus on long term growth potential, coupled with asset protection and cost containment, continues to be a focus for ATRS.

#### **Additions/Deductions to Plan Net Assets**

As a retirement system matures, employer and member contributions are supplemented from investment earnings to fully fund retirement benefits and operating costs. This process is intended to leave the investment nucleus untouched to continue providing the required investment income for future generations of plan participants.

Fiscal year 2023 contributions totaled about \$737 million dollars (\$537 million employer and \$201 million member) and remained stable from previous years. As ATRS becomes a more mature system, the total active members compared to retirees will continue to move more towards a one-to-one ratio, and is now about a 1.3 to one ratio. This equalization trend will occur for some time as ATRS matures, as the Baby Boomer generation reaches retirement age, and as schools continue to consolidate and outsource nonteaching positions to private contractors in transportation, food service, custodial services, and substitute teachers.

**Funding Status**

ATRS had an 8.71% actuarially-determined return as compared to its 7.25% assumed rate of return. To reduce the impact of wild swings in the financial markets, annual results are spread over a four-year period (four-year smoothing). ATRS remains a stable 82% funded. Amortization required to fund the unfunded accrued actuarial liability (UAAL) remains stable at 26 years.

**Internal Control**

Internal controls are at the heart of safeguarding the System’s assets. ATRS has an active internal audit department that is continually reviewing and updating control policies. As the System grows and technology advances, we feel it prudent to continuously monitor

internal systems and policies to detect and correct potential errors before they occur and to correct any errors that are discovered.

**Professional Services**

The ATRS Board of Trustees employs firms that are proven experts to draw on their knowledge and expertise on policy and administration. ATRS’ independent general investment consultant and real asset consultant is AON Hewitt Investment Consulting, headquartered in Chicago, IL; the private equity consultant is Franklin Park Associates, LLC of Bala Cynwyd, PA; and the independent actuary is Gabriel Roeder Smith & Company, headquartered in Southfield, MI. The System also uses the services of specialized consultants along with national and local legal firms.

**Acknowledgements**

This report is intended to provide complete and reliable information as a foundation for management decisions, determining compliance with legal provisions, and determining conscientious administration of the System’s fund. Compilation of this report symbolizes the collective efforts of the staff, under the direction of the Board of Trustees.

This report is posted on the ATRS website (artrs.gov) and hard copies are available upon request.

Respectfully submitted,



Mark White  
Executive Director



## Member and Retired Trustees

**POSITION # 1**  
**Active Member Trustee**  
**1st Congressional District**

---

**Susan Ford**  
Cabot, AR  
Trustee Since 7/1/2022  
Term Expires 6/30/2028

**POSITION # 4**  
**Active Member Trustee**  
**4th Congressional District**

---

**Keri Hamilton**  
Magnolia AR  
Trustee Since 12/04/2023  
Term Expires 6/30/2030

**POSITION # 8**  
**Active Member Trustee**  
**Minority Trustee**

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**Anita Bell**  
North Little Rock, AR  
Trustee Since 7/1/2015  
Term Expires 6/30/2027

**POSITION # 2**  
**Active Member Trustee**  
**2nd Congressional District**

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**Michael Johnson**  
Sherwood, AR  
Trustee Since 11/10/2020  
Term Expires 6/30/2027

**POSITION # 5**  
**Active Member Trustee**  
**Administrator Trustee**

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**Dr. Mike Hernandez**  
Little Rock, AR  
Trustee Since 11/10/2020  
Term Expires 6/30/2027

**POSITION # 9**  
**Retired Member Trustee**

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**Jeff Stubblefield**  
Charleston, AR  
Trustee Since 7/1/2022  
Term Expires 6/30/2028

**POSITION # 3**  
**Active Member Trustee**  
**3rd Congressional District**

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**Arthur "Chip" Martin**  
Fayetteville, AR  
Trustee Since 7/1/2019  
Term Expires 6/30/2025

**POSITION # 6**  
**Active Member Trustee**  
**Administrator Trustee**

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**Shawn Higginbotham**  
Hot Springs, AR  
Trustee Since 9/12/2019  
Term Expires 6/30/2027

**POSITION # 10**  
**Retired Member Trustee**

---

**Bobby G. Lester**  
Jacksonville, AR  
Trustee Since 7/1/2007  
Term Expires 6/30/2025

**POSITION # 7**  
**Active Member Trustee**  
**Non-Certified Trustee**

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**Kelsey Bailey**  
Little Rock, AR  
Trustee Since 09/25/2023  
Term Expires 6/30/2030

**POSITION # 11**  
**Retired Member Trustee**

---

**Danny Knight (Chair)**  
Sherwood, AR  
Trustee Since 6/6/2011  
Term Expires 6/30/2024

## Ex Officio Trustees

**Secretary of Education**

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**Jacob Oliva**  
Little Rock, AR

**State Bank Commissioner**

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**Susannah Marshall**  
Little Rock, AR

**State Auditor**

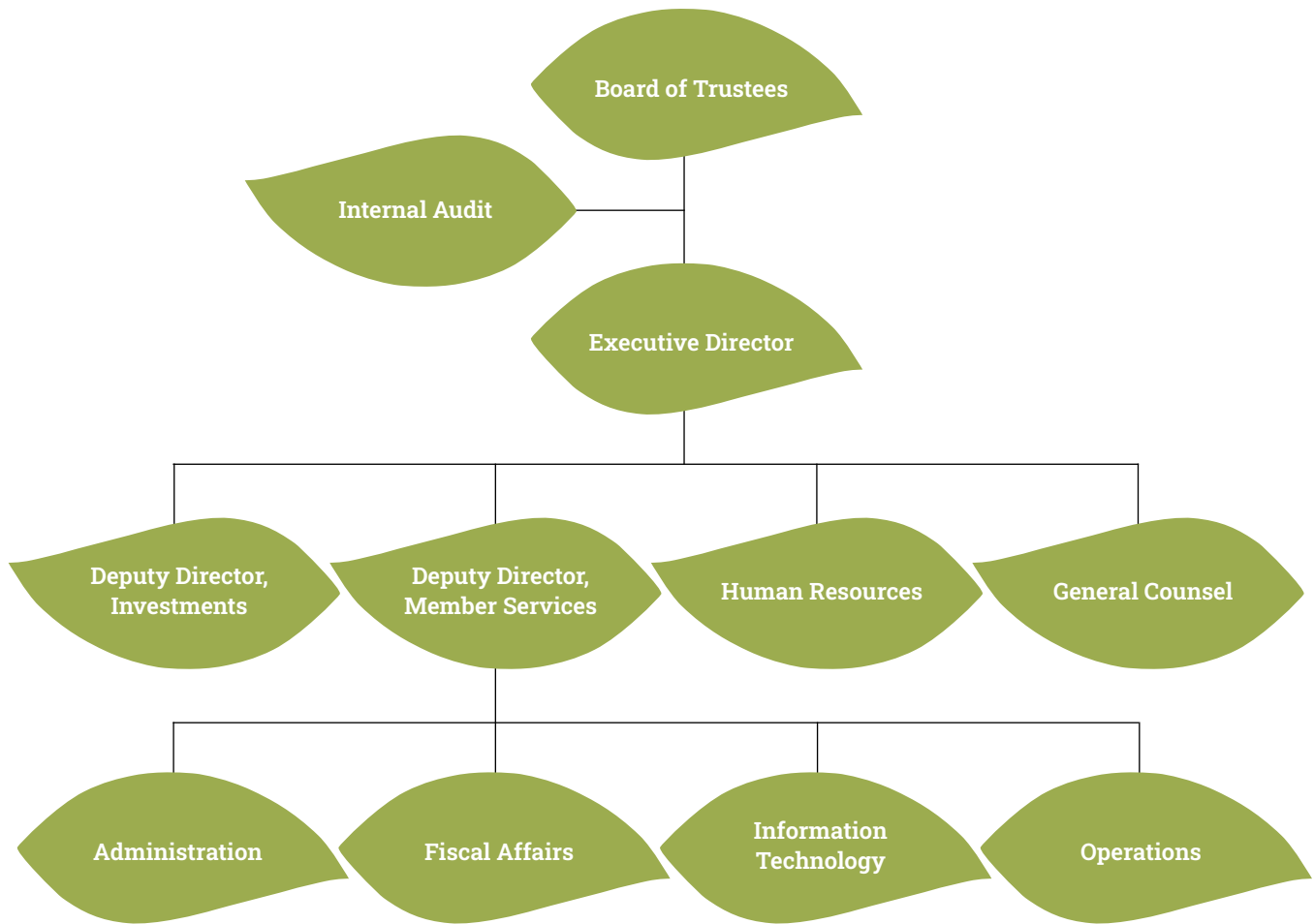
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**Dennis Milligan**  
Little Rock, AR

**State Treasurer**

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**Larry Walther**  
Little Rock, AR



## Administrative Staff

Mark White  
**Executive Director**

Rod Graves  
**Deputy Director, Investments**

Sarah Linam  
**Deputy Director, Member Services**

Jennifer Liwo  
**General Counsel**

Willie Kincade  
**Associate Director of Operations**

Curtis Carter, CPA  
**Associate Director of Fiscal Affairs**

Mullahalli Manjunath  
**Associate Director of Information Technology**

Vicky Fowler  
**Human Resources Manager**

Tammy Porter  
**Board Secretary**

Brenda West, CPA  
**Internal Auditor**



### Actuary

Gabriel Roeder Smith & Company | Southfield, MI

### Legal Counsel

Gill, Ragon, Owen PA | Little Rock, AR

Kutak Rock, LLP | Scottsdale, AZ

Rose Law Firm, PA | Little Rock, AR

### Securities Monitoring Counsel

Bernstein Litowitz Berger & Grossman, LLP | New York, NY

Bleichmar Fonti & Auld, LLP | New York, NY

Cohen Milstein Sellers & Toll, PLLC | New York, NY

Kaplan Fox & Kilsheimer LLP | New York, NY

Kessler, Topaz, Meltzer and Check LLP | Radnor, PA

Labaton Keller Sucharow, LLP | New York, NY

### Investment Consultant

AON Hewitt Investment Consulting | Chicago, IL

Franklin Park | Bala Cynwyd, PA

Arkansas Capital Corporation | Little Rock, AR

### Custodian (Domestic and International)

State Street Bank & Trust Company | Quincy, MA

### Public Markets

Arrowstreet Capital | Boston, MA

BlackRock | San Francisco, CA

D.E. Shaw & Company, L.P. | New York, NY

GMO, LLC | Boston, MA

Harris Associates, L.P. | Chicago, IL

Jacobs Levy Equity Management, Inc. | Florham Park, NJ

Kennedy Capital Management | St. Louis, MO

Lazard Asset Management, LLC | New York, NY

Loomis Sayles & Company, L.P. | Boston, MA

Pershing Square Holdings | Saint Peter Port, Guernsey

Putnam Investments Management | Boston, MA

Reams Asset Management | Columbus, IN

Russell Implementation Services | Seattle, WA

State Street Global Advisors | Boston, MA

State Street Global Markets, LLC | Boston, MA

State Street - Securities Lending | Boston, MA

Stephens Investment Management | Houston, TX

Triam Partners | New York, NY

T. Rowe Price Associates, Inc. | Baltimore, MD

Voya Investment Management | Chicago, IL

Wellington Management Co. LLP | Boston, MA

Westrock Coffee Company | Little Rock, AR

### Private Equity

Franklin Park | Bala Cynwyd, PA

Advent International Corporation | Boston, MA

Alpine Investors | San Francisco, CA

Altaris Capital Partners, LLC | New York, NY

Altus Capital Partners | Westport, CT

American Industrial Partners | New York, NY

Arlington Capital Partners | Chevy Chase, MD

Atlas Holdings LLC | Greenwich, CT

Audax | New York, NY

The Beekman Group | New York, NY

Big River Steel | Osceola, AR  
Bison Capital Asset Management, LLC | Santa Monica, CA  
BV Investment Partners | Boston, MA  
Castlelake | Minneapolis, MN  
Clearlake Capitol Group | Santa Monica, CA  
Court Square Capital Partners III, L.P. | New York, NY  
The Cypress Group | New York, NY  
Diamond State Ventures | Little Rock, AR  
D W Healthcare | Park City, UT  
EnCap Investments L.P. | Houston, TX  
Greenbriar Equity Group | Rye, NY  
Greyrock Capital Group, LLC | Chicago, IL  
Grosvenor Capital Management | New York, NY  
GTLA | Pine Bluff, AR  
Highland, LP | Pine Bluff, AR  
Hybar | Osceola, AR  
Insight Equity | Insight Mezzanine | Southlake, TX  
J.F. Lehman & Company | New York, NY  
KPS Capital Partners | New York, NY  
Levine Leichtman III | Beverly Hills, CA  
Lime Rock Resources III | Westport, CT  
LLR Equity Partners III | Philadelphia, PA  
Mason Wells | Milwaukee, WI  
Natural Gas Partners | Irving, TX  
One Rock Capital Partners, LLC | New York, NY  
Pine Bridge Investments | New York, NY  
Post Road Group | Stamford, CT  
Revelstoke Capital Partners | Denver, CO  
The Riverside Company | Cleveland, OH  
Riverside Partners | Boston, MA  
Siris Capital Group | New York, NY

SK Capital Partners | New York, NY  
Sycamore Partners III | New York, NY  
TA XI | Boston, MA  
Tennenbaum | Santa Monica, CA  
Thoma Bravo LLC | San Francisco, CA  
VISTA Equity Partners | San Francisco, CA  
Wellspring Capital Management, L.L.C. | New York, NY  
The Wicks Group of Companies, L.L.C. | New York, NY  
WNG Capital | Dallas, TX

### Real Assets

#### Infrastructure

Antin Infrastructure Partners | London, England  
Axiom Infrastructure | New York, NY  
DIF | Amsterdam, Netherlands  
Global Energy & Power Infrastructure Fund | Greenwich, CT  
Global Infrastructure Partners | New York, NY  
IFM Investors (US), LLC | New York, NY  
I Squared Capital | Miami, FL  
Kohlberg Kravis Roberts & Co. | New York, NY  
Macquarie Infrastructure and Real Assets | Chicago, IL

#### Real Estate

Almanac Realty Securities | New York, NY  
Blackstone Real Estate Partners | New York, NY  
Calmwater | Los Angeles, CA  
The Carlyle Group | New York, NY  
CB Richard Ellis Strategic Partners | Los Angeles, CA  
Cerberus | New York, NY  
FPA Core Plus | Irvine, CA

GLP Capital Partners | Santa Monica, CA  
Harbert Management Corporation | Dallas, TX  
Heitman | Chicago, IL  
J.P. Morgan Asset Management | New York, NY  
Kayne Anderson | Los Angeles, CA  
Landmark Partners | Simsbury, CT  
LaSalle | Chicago, IL  
LBA Logistics | Irvine, CA  
Lone Star Real Estate Partners Fund IV, LP | Dallas, TX  
Long Wharf Real Estate Partners LLC | Boston, MA  
Mesa West Capital | Los Angeles, CA  
MetLife Commercial | Morristown, NJ  
Metropolitan Real Estate Partners Co-Investments Fund | New York, NY  
New Boston Fund VII | Boston, MA  
O'Connor North American Property Partners II | New York, NY  
PGIM Real Estate | New York, NY  
Rockwood Capital Real Estate Partners | New York, NY  
RREEF | New York, NY  
Torchlight Investors | New York, NY  
UBS Realty Investors | Hartford, CT  
Walton Street Capital | Chicago, IL  
Westbrook Funds | New York, NY

### Direct Real Estate Partnerships

CRI – American Center | Rogers, AR

### Alternative Investments

#### Hedge Funds

Anchorage Capital Group, L.L.C. | New York, NY  
Capital Fund Management | Paris, France  
Capula Investment US LP | Greenwich, CT  
Chatham Asset Management | Chatham, NJ  
Circumference Group | Little Rock, AR  
Graham Capital Management, L.P. | Rowayton, CT  
Man Group | New York, NY  
Parametric | Minneapolis, MN  
Prophet Asset Management | Austin, TX  
York Capital Management | New York, NY  
Silverpoint Capital | Greenwich, CT

#### Re-Insurance

Aeolus | Hamilton, Bermuda  
Nephila Capital Rubik Holdings | Hamilton, Bermuda  
Pillar Capital Management | Hamilton, Bermuda

#### Farm Manager

US Agriculture | Wabash, IN  
UBS Agrinvest | Dallas, TX

#### Timberland

BTG Pactual Timberland Investment Group | Atlanta, GA

# Financial



## Statement of Fiduciary Net Position

June 30, 2023

	Totals
<b>Assets</b>	
Cash and cash equivalents	\$ 349,168,296
<b>Receivables</b>	
Member contributions	11,724,778
Employer contributions	28,876,070
Investment trades pending	14,833,999
Accrued investment income	24,965,467
Due from other funds	20,157,127
Other receivables	2,809,166
Total Receivables	<u>103,366,607</u>
<b>Investments, at fair value</b>	
Public equities	3,715,263,524
Fixed income	1,686,126,493
Real estate	175,694,289
Pooled investments	5,555,585,690
Alternative investments	9,005,490,510
State recycling tax credits	129,552,000
Investment derivatives	(17,622)
Total Investments	<u>20,267,694,884</u>
Securities lending collateral	457,490,175
Capital assets, net of accumulated depreciation	73,496
Other assets	<u>138,508</u>
<b>Total Assets</b>	<b><u>21,177,931,966</u></b>
<b>Deferred Outflows of Resources</b>	
Deferred outflows related to OPEB	<u>493,831</u>
<b>Total Assets and Deferred Outflows of Resources</b>	<b><u>21,178,425,797</u></b>
<b>Liabilities</b>	
Accrued expenses and other liabilities	469,337
Compensated absences	554,664
Post-employment benefit liability	3,248,593
Investment trades pending payable	24,076,623
Accrued investment expenses	13,598,456
Securities lending liability	457,448,502
Due to other funds	<u>2,317,789</u>
<b>Total Liabilities</b>	<b><u>501,713,964</u></b>
<b>Deferred Inflows of Resources</b>	
Deferred inflows of resources related to OPEB	<u>1,659,915</u>
<b>Total Liabilities and Deferred Inflows of Resources</b>	<b><u>503,373,879</u></b>
<b>Net Position Restricted for Pension Benefits</b>	<b><u>\$ 20,675,051,918</u></b>

The accompanying notes are an integral part of these financial statements.

## Statement of Changes in Fiduciary Net Position

June 30, 2023

	Totals
<b>Additions</b>	
<b>Contributions</b>	
Member	\$ 200,610,721
Employer	536,619,031
Total contributions	<u>737,229,752</u>
<b>Investment income</b>	
<b>From investing activities</b>	
Net appreciation (depreciation) in fair value of investments	1,551,241,387
Interest and dividends	175,914,000
Real estate operating income	6,437,924
Total investment income (loss)	1,733,593,311
Less investment expense	45,303,664
Net investment income (loss)	<u>1,688,289,647</u>
<b>From securities lending activities</b>	
Securities lending gross income	23,296,797
Less: securities lending expense	19,506,915
Net securities lending income (loss)	<u>3,789,882</u>
<b>Other income</b>	<u>229,734</u>
<b>Total Additions (Losses)</b>	<u>2,429,539,015</u>
<b>Deductions</b>	
Benefits	1,413,477,760
Refunds of contributions	12,583,767
Administrative expenses	7,892,822
<b>Total Deductions</b>	<u>1,433,954,349</u>
<b>Net Change in Position</b>	995,584,666
<b>Net Position - Beginning of Year</b>	<u>19,679,467,252</u>
<b>Net Position - End of Year</b>	<u>\$ 20,675,051,918</u>

The accompanying notes are an integral part of these financial statements.

# Notes to Financial Statements

June 30, 2023

## NOTE 1: Summary of Significant Accounting Policies

### A. Reporting Entity/History

Act 266 of 1937, as amended, established the Arkansas Teacher Retirement System (ATRS) as an office of Arkansas state government for the purpose of providing retirement benefits for public school and other public education employees. Act 427 of 1973, as amended, provided that the general administration of ATRS, responsibility for its proper operation, and responsibility for making effective the provisions of the Teacher Retirement law are vested in a 15-member Board of Trustees. The State Bank Commissioner, Treasurer of State, Auditor of State, and Commissioner of Elementary and Secondary Education are exofficio trustees. The remaining 11 trustees are elected and consist of seven active members of ATRS with at least five years of actual service, three retired members receiving an annuity from ATRS, and one active or retired member from a minority racial ethnic group. The seven active trustees consist of one member from each of the four congressional districts; two employed in positions requiring an administrator's license, of which one must be a superintendent or an educational cooperative director; and one member employed in a position that does not require state licensure. The trustees are elected in accordance with rules adopted by the Board. Board members serve as trustees without compensation but are reimbursed for any necessary expenses incurred to attend Board meetings or perform other duties authorized by the Board.

### B. Plan Description

ATRS is a cost-sharing, multiple-employer, defined benefit pension plan that covers employees of schools and education-related agencies, including Arkansas School for the Blind, Arkansas School for the Deaf, Arkansas Activities Association, State Board of Education, regional education service cooperatives, ATRS, Arkansas Educational Television Commission, area vocational-technical schools, Arkansas Rehabilitation Services, enterprises privatized by a public school district, and educational nonprofit organizations licensed and regulated by Division of Developmental Disabilities Services of the Department of Human Services.

Members are eligible for full retirement benefits at age 60 with five or more years of actual and reciprocal service or at any age with 28 or more years of credited service. Members with 25 years of actual and reciprocal service who have not attained age 60 may receive an annuity reduced by 10/12 of 1% multiplied by the number of months by which the early retirement precedes the earlier of (1) completion of 28 years of credited service or (2) attainment of age 60. The normal retirement benefit, paid monthly, is determined based on (1) the member's final average salary (FAS) (effective July 1, 2018, computed using the average of the annual salaries paid during the period of 5 years of credited service producing the highest annual average) and (2) the number of years of service. For active members as of June 30, 2018, a benchmark 3-year FAS was established as a minimum FAS.

On June 30, 2023, the number of participating employers was as follows:

Public schools	256
State colleges and universities	38
State agencies	17
Other/privatized	27
<b>Total</b>	<b>338</b>

On June 30, 2023, ATRS's membership consisted of the following:

Retirees or beneficiaries currently receiving benefits	54,646
T-DROP participants	3,138
Inactive plan members (not receiving benefits)	14,355
Active members	
Fully vested	44,962
Non-vested	23,287
<b>Total</b>	<b>140,388</b>

## Notes to Financial Statements (Continued)

June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

#### B. Plan Description (Continued)

ATRS has contributory and noncontributory plans. The contributory plan has been in effect since the beginning of ATRS. The noncontributory plan became available July 1, 1986. Act 907 of 1999, effective July 1, 1999, requires all new members under contract for 181 or more days to be contributory. Act 443 of 2021, effective July 1, 2021, increased the required number of contract days to 185 or more days. Act 385 of 2005 allows noncontributory members to make an irrevocable election to become contributory on July 1 of each fiscal year.

A cost of living adjustment (COLA) is payable on July 1 of each year to retirees, certain survivors, and annuity beneficiaries who received monthly benefits for the previous 12 months. The COLA is calculated by multiplying 100% of the member's base retirement annuity times 3%. Act 780 of 2017 allows the Board of Trustees to evaluate any future COLA adjustments on an annual basis to determine if a simple or compound COLA increase will be given based on the financial condition of the system.

Act 1096 of 1995 created a teacher deferred retirement option plan (T-DROP) for members with 30 or more years of service credit. Effective September 1, 2003, Act 992 of 2003 requires employers to make contributions on behalf of all members participating in T-DROP at rates established by the Board of Trustees. Member contributions and accumulation of service credit will cease once a member enters T-DROP. During participation in T-DROP, ATRS will credit the member account with plan deposits and interest. The plan deposits will be calculated beginning with the member's plan benefit reduced by 1% for each year of credited service. The Board of Trustees may authorize early participation in T-DROP for members with at least 28 years but less than 30 years of credited service. The plan deposit for early participation will be calculated the same as the regular T-DROP deposit with a further reduction of at least .5% but not more than 1% for each month of credited service under 30 years. The T-DROP account accrues interest at a variable rate that is set annually by the ATRS Board of Trustees. T-DROP deposits into member accounts cease at the completion of 10 years of participation in the program; however, a member may continue employment and will continue to receive interest on the account balance at the 10-year plus interest rate that is also set annually by the Board of Trustees. When T-DROP participation ceases, the member may receive a distribution as a lump-sum cash payment or monthly annuity, roll it into another

tax-deferred account, or defer the distribution into a T-DROP cash balance account held by ATRS.

Disability retirement benefits are payable to members who are vested and demonstrate total and permanent incapacity to perform the duties of their position while in active employment. The disability annuity is computed in the same manner as the age and service annuity.

Survivor benefits are payable to qualified survivors upon the death of an active, vested member. Eligible spouse survivors receive a survivor annuity that is based on the member's years of service credit prior to their death, and minor child survivors receive a percentage of the member's highest salary earned. ATRS also provides a lump sum death benefit for active and retired members with 10 or more years of actual service. The minimum benefit amount is \$6,667 and an additional amount is provided based on the member's retirement date and years of contributory service up to a \$10,000 maximum.

#### C. Basis of Presentation – Fund Accounting

The accounting system is organized and operated on a fund basis. A fund is defined as a fiscal and accounting entity with a self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances and changes therein, which are segregated for purposes of carrying on specific activities or attaining certain objectives in accordance with special regulations, restrictions, or limitations. The following types of funds, if applicable to this Agency, are recognized in the accompanying financial statements.

#### Fiduciary Funds

Trust and Custodial Funds – Trust and Custodial Funds are used to report resources held by the Agency in a trustee capacity or as an agent for individuals, other governmental units, and other funds. These include Pension Trust Funds, Employee Health Trust Funds, Investment Trust Funds, Private-Purpose Trust Funds, and Custodial Funds. The specific activity accounted for at this Agency includes the following:

Arkansas Teacher Retirement System Pension Trust Fund



## Notes to Financial Statements

June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

#### D. Basis of Accounting

Basis of accounting refers to when revenues and expenditures or expenses are recognized and reported in the financial statements. The economic resources measurement focus and accrual basis of accounting are used in Fiduciary Fund financial statements. Under the accrual basis, revenues are recognized when earned, and expenses are recorded when incurred.

#### E. Federal Income Tax Status

During the year ended June 30, 2023, ATRS was a qualified plan under 26 USC § 401(a) and was exempt from federal income taxes under 26 USC § 501(a).

#### F. Cash and Cash Equivalents

Cash and cash equivalents include demand accounts, imprest accounts, cash on hand, cash in State Treasury, cash on deposit with investment managers, and short-term investment funds (STIF). The STIF accounts are created through daily sweeps of excess cash by the custodial bank into bank-sponsored commingled funds that are invested in U.S. Government and agency securities and other short-term investments. The STIF accounts have a weighted average maturity of 90 days or less and the holdings are stated a fair value.

#### G. Deposits and Investments

##### Deposits

Deposits are carried at cost and consist of cash in bank, cash in State Treasury, and cash on deposit with investment managers, and cash in short-term investment funds totaling \$5,356,299, \$3,137,421, \$111,728,377, and \$228,946,124, respectively. The STIF account is valued at amortized cost which approximates fair

value and all other deposits are carried at cost. State Treasury Management Law governs the management of funds held in the State Treasury, and the Treasurer of State is responsible for ensuring these funds are adequately insured and collateralized.

**Custodial Credit Risk** – Custodial credit risk for deposits is the risk that, in the event of the failure of a depository institution, the Agency will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The Agency has adopted the State Board of Finance Policy requiring the use of depository insurance and collateralization procedures to manage the risk that deposits may not be returned. As of June 30, 2023, none of the Agency's bank balance of \$5,357,769 was exposed to custodial credit risk.

As of June 30, 2023, \$1,760,901 of \$112,124,986 in cash held by investment managers was exposed to custodial credit risk as it was uninsured and uncollateralized.

As of June 30, 2023, none of the \$228,946,124 balance in cash in the STIF account was exposed to custodial credit risk as it was collateralized with securities held by the custodial agent in the name of ATRS.

##### Investments

Ark. Code Ann. §§ 24-2-601 – 24-2-619 authorizes the ATRS Board of Trustees to have full power to invest and reinvest monies of ATRS and to hold, purchase, sell, assign, transfer or dispose of any of the investments, or investment proceeds in accordance with the prudent investor rule.

Each investment manager is required to invest within the specific guidelines and parameters set by the Board of Trustees. Asset allocation guidelines have been established as follows:

# Notes to Financial Statements

June 30, 2023

## NOTE 1: Summary of Significant Accounting Policies (Continued)

### G. Deposits and Investments (Continued)

#### Investments (Continued)

Asset Allocation	Minimum	Target	Maximum
Total equity	48.0%	53.0%	58.0%
Fixed income	13.0%	15.0%	17.0%
Alternatives	N/A*	5.0%	N/A*
Real assets***	N/A*	15.0%	N/A*
Private equity	N/A*	12.0%	N/A*
Cash equivalents	0.0%	0.0%	5.0%

\*Due to the illiquid nature of alternatives, real assets, and private equity, it is not prudent to set rebalancing ranges for these asset classes.

\*\*Additional allocations to total equity may be made beyond the maximum range to serve as a placeholder for unfunded and uncommitted alternatives, real assets, and private equity.

\*\*\*Real assets include real estate, timber, agriculture, and infrastructure.

The fair value measurement of investments is categorized within the hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. In instances where inputs used to measure fair value fall into different levels, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation.

The hierarchy is defined as follows:

- Level 1:** Unadjusted quoted prices for identical instruments in active markets.
- Level 2:** Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.
- Level 3:** Valuations derived from valuation techniques in which significant inputs are unobservable.

Assets classified in Level 1 are valued directly from a predetermined primary external pricing vendor. Assets classified in Level 2 are subject to pricing by an alternative pricing source due to lack of information available by the primary vendor. Assets classified in Level 3 are valued using an internal fair value as provided by the investment manager due to lack of an independent pricing source. For investments that do not have a readily determinable fair value and fall outside of the fair value hierarchy, the system establishes the value by utilizing the Net Asset Value (NAV) or its equivalent as a practical expedient.

The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument(s) and should not be perceived as the particular investment's risk. The fair value measurement of plan investments and securities lending collateral as of June 30, 2023, was as follows:

## Notes to Financial Statements

June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

#### G. Deposits and Investments (Continued)

##### Investments (Continued)

Investments measured at fair value	Total	Level 1	Level 2	Level 3
<b>Public equity investments:</b>				
Domestic equities	\$ 2,529,485,813	\$ 2,529,485,813		
International equities	1,069,554,260	1,069,554,260		
Preferred equities	116,223,451	106,967,452		\$ 9,255,999
<b>Fixed income investments:</b>				
U.S. Government obligations	109,988,381		\$ 109,988,381	
Corporate obligations	1,244,481,439		1,244,481,439	
Asset- and mortgage-backed securities	34,456,773		34,456,773	
Fixed income funds	47,818,093		47,818,093	
Promissory notes	249,381,807			249,381,807
<b>Real estate investments:</b>				
Real estate	73,055,424			73,055,424
Real estate investment trusts	102,638,865	102,638,865		
<b>State recycling tax credits:</b>				
Derivative investments:			129,552,000	
Forward contracts	(17,622)		(17,622)	
<b>Total plan investments at fair value</b>	<b>5,706,618,684</b>	<b>\$ 3,808,646,390</b>	<b>1,566,279,064</b>	<b>331,693,230</b>
<b>Investments measured at net asset value (NAV)</b>				
<b>Pooled investments:</b>				
Collective investment trusts	4,765,569,172			
Closed end funds	764,454,223			
Exchange traded funds	25,562,295			
<b>Alternative investments:</b>				
Private equity funds	3,176,323,251			
Real estate funds	2,002,060,137			
Hedge funds	1,199,332,368			
Other private investments	2,627,774,754			
Total plan investments at net asset value	14,561,076,200			
<b>Total plan investments</b>	<b>\$ 20,267,694,884</b>			
Securities Lending Collateral:				
Compass fund*	\$ 457,490,175			

\*Cash collateral received totaled \$457,448,502. The amount reported in the GASB Statement No. 40 footnote above is the market value of the collateral received at June 30, 2023.

## Notes to Financial Statements

June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

#### G. Deposits and Investments (Continued)

##### Investments (Continued)

Public equity investments are classified as Level 1 and valued based on published market prices and quotations from either national security exchanges or active markets for those securities.

Fixed income investments are classified as Level 2 and include publicly traded securities in inactive markets. Investments in this category are sourced from reputable pricing vendors using price matrix models and techniques. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Fair value is defined as the quoted market value on the last trading day of the period.

Real estate consists of direct real estate investments and real estate investment trusts. Direct real estate investments are classified as Level 3 and are comprised mostly of owned properties leased to commercial enterprises. These investments are valued using professional property valuations or appraisals, net of debt borrowed against the related assets. Appraisals and valuations are updated every 3 years. Real estate investment trust are valued at net asset value (NAV) per share calculated at the estimated market value of the total assets less liabilities divided by the number of common shares outstanding. These are classified as Level 1 since they report a daily NAV per share and are actively traded on either national security exchanges or active markets for those securities.

Pooled investments consist of collective investments trusts, closed end funds, exchange traded funds and mutual funds. The fair value of these investments is determined based on net asset value (NAV) per share calculated as assets less liabilities divided by the number of shares owned. These investments are classified as Level 1 since they report a daily NAV per share and are actively traded on either national security exchanges or active markets for those securities.

Derivative investments include forward contracts and warrants and are classified as Level 2 and valued using observable exchange, dealer, or broker market pricing.

Alternative Investments are valued using the net asset value (NAV) per share (or its equivalent) but generally do not have a readily obtainable market value. These values are based on the capital account balance of the general partner reports at the end of each reporting period, adjusted by subsequent contributions, distributions, management fees, and changes in values of foreign currency. There are inherent uncertainties in estimating fair values for these types of investments, and it is possible that the estimates will change in the near-term or the subsequent sale of assets will be different from the reported net asset value. Generally, the investments cannot be redeemed or have certain redemption restrictions and distributions are from the liquidation of the underlying assets. The expected holding period is dependent on the discretion of the fund manager.

The unfunded commitments and redemption terms for alternative investments measured at the net asset value (NAV) per share (or its equivalent) are presented in the following table:

# Notes to Financial Statements

June 30, 2023

## NOTE 1: Summary of Significant Accounting Policies (Continued)

### G. Deposits and Investments (Continued)

#### Investments (Continued)

Investments measured at net asset value (NAV)	Total	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
<b>Pooled investments:</b>				
Collective investment trusts	\$ 4,765,569,172		Daily	1-30 days
Closed end funds	764,454,223		Daily	Daily
Exchange traded funds	25,562,295		Daily	Daily
<b>Alternative investments:</b>				
Private equity funds				
Buyout funds	1,396,304,427	\$ 670,588,147	N/A	N/A
Distressed debt funds	20,670,755	37,207,326	N/A	N/A
Growth equity funds	31,970,353	11,557,033	N/A	N/A
Hard assets	132,688,385	21,683,853	N/A	N/A
Infrastructure funds	491,096,503	112,920,296	Quarterly - Annually	90 days
Mezzanine funds	53,076,638	38,633,246	N/A	N/A
Multi-strategy funds	441,228,489	341,301,109	N/A	N/A
Structured capital funds	43,657,375	42,441,589	N/A	N/A
Turnaround funds	121,918,983	98,290,038	N/A	N/A
Venture capital funds	443,711,343	158,134,151	N/A	N/A
Real estate funds				
Core funds	821,624,886	21,000,000	Quarterly	30-90 days
Debt funds	124,704,241	65,851,714	Quarterly	90 days
Farmland funds	238,390,888	19,105,587	Quarterly	60 days
Opportunistic funds	161,764,557	436,854,903	N/A	N/A
Timberland funds	338,018,819		Quarterly	90 days
Value added funds	317,556,746	281,766,335	N/A	N/A
Hedge funds				
Co-investment funds	81,506,939	30,188,076	Quarterly	65 days
Credit funds	214,278,554		Quarterly - Annually	90 days
Equity funds	39,818,815		Quarterly	60 days
Event driven funds	83,685,761		Annually	90 days
Global macro funds	191,210,229		Monthly	3-15 days
Mortgage servicing fund	40,288,622		Semi-annually	90 days
Reinsurance funds	131,945,864		Semi-annually - Annually	60-90 days
Relative value funds	95,719,384		Quarterly	45 days
Risk premia funds	320,878,200		Weekly - Monthly	3-5 days
Other				
Private investments	2,627,774,754		Semi-monthly - Monthly	3-7 days
<b>Total plan investments at net asset value</b>	<b>\$ 14,561,076,200</b>	<b>\$ 2,387,523,403</b>		

## Notes to Financial Statements

June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

#### G. Deposits and Investments (Continued)

##### Investments (Continued)

**Private Equity Funds** – Private equity funds include 69 buyout funds, 3 distressed debt funds, 3 growth equity funds, 13 hard asset funds, 12 infrastructure funds, 5 mezzanine funds, 5 multi-strategy funds, 4 structured capital funds, 10 turnaround funds, and 15 venture capital funds that invest mostly in private companies across a variety of industries. The value of the investments in this type have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. These investments cannot be easily redeemed. The nature of private equity investments is that distributions are received through the liquidation of the underlying assets of the fund. The expected holding period of a private equity portfolio company is 2 to 10 years.

**Real Estate Funds** – Real estate funds include 7 core funds, 8 debt funds, 2 farmland funds, 22 opportunistic funds, 2 timberland funds, and 22 value added funds that invest primarily in the United States, Europe, and Asia. Fund investments can be made in the debt, equity, or a combination of both in real estate property ventures. The value of the investments in this asset class have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. These investments can be redeemed with proper

notification to the fund manager. Distributions from each fund may be received as cash flows from operations or return of capital from sales of assets. The expected holding period of underlying assets in the real estate funds is 2 to 10 years.

**Hedge Funds** – Hedge funds consist of 1 co-investment fund, 5 credit funds, 1 equity fund, 1 event driven fund, 2 global macro funds, 1 opportunistic funds, 12 re-insurance funds, 1 relative value fund and 2 risk premia funds. The value of the investments in this asset class have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. Redemption ranges from monthly to annually depending on the manager (except for one fund that currently has a 1-year hold). Distributions are received through liquidation of the underlying assets. The expected holding period is dependent on the discretion of the fund manager.

**Securities Lending Collateral** – Cash collateral received from borrowers in the securities lending program is invested in a collective investment fund comprised of a liquidity pool. The value of this fund has been determined by the fund administrator using the NAV per share (or its equivalent).  
**Concentration of Investments** – Generally accepted accounting principles require each pension plan to disclose investments (other than those issued or explicitly guaranteed by the U.S. Government) in any one organization that represent 5% or more of the pension plan's fiduciary net position. As of June 30, 2023, the Agency had investments of 5% or more of fiduciary net position in the following organizations:

## Notes to Financial Statements

June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

#### G. Deposits and Investments (Continued)

##### Investments (Continued)

Organization	Net Asset Value
<b>Blackrock Institutional Trust Company, N.A.</b>	
BlackRock MSCI ACWI IMI Index Fund	\$ 1,310,986,178
BlackRock U.S. Core Plus Bond Fund	250,429,410
<b>Total</b>	<b>\$ 1,561,415,588</b>
<b>Franklin Park Associates, LLC</b>	
ATRS/FP Private Equity Fund, LP	\$ 383,793,959
Franklin Park Corporate Finance Access Fund, LP	78,562,182
Franklin Park Corporate Finance Access Fund II, LP	12,298,104
Franklin Park International Fund 2011, LP	10,654,654
Franklin Park International Fund 2012, LP	7,607,582
Franklin Park International Fund 2013, LP	16,792,603
Franklin Park International Fund 2014, LP	16,858,530
Franklin Park International Fund 2015, LP	22,351,074
Franklin Park International Fund 2016, LP	22,671,829
Franklin Park International Fund 2017, LP	30,015,412
Franklin Park International Fund 2018, LP	29,118,750
Franklin Park International Fund 2019, LP	31,351,502
Franklin Park International Fund X, LP	23,734,631
Franklin Park International Fund XI, LP	2,408,869
Franklin Park Venture Capital Fund XIII, LP	41,041,441
Franklin Park Venture Capital Fund XIV, LP	4,250,536
Franklin Park Venture Capital Opportunity Fund, LP	15,584,803
Franklin Park Co-Investment Fund VI, LP	6,846,154
Franklin Park Venture Fund Series 2008, LP	21,015,105
Franklin Park Venture Fund Series 2009, LP	8,881,556
Franklin Park Venture Fund Series 2010, LP	28,445,264
Franklin Park Venture Fund Series 2011, LP	34,454,293
Franklin Park Venture Fund Series 2012, LP	33,723,446
Franklin Park Venture Fund Series 2013, LP	36,250,998
Franklin Park Venture Fund Series 2014, LP	48,735,471
Franklin Park Venture Fund Series 2015, LP	35,510,204
Franklin Park Venture Fund Series 2016, LP	40,977,661
Franklin Park Venture Fund Series 2017, LP	28,664,709
Franklin Park Venture Fund Series 2018, LP	37,177,076
Franklin Park Venture Fund Series 2019, LP	28,998,780
<b>Total</b>	<b>\$ 1,138,777,178</b>
<b>Jacobs Levy Equity Management, Inc.</b>	
Jacobs Levy 130-30 Core 3 Fund, LLC	\$ 1,234,178,399
<b>State Street Global Advisors Trust Company</b>	
State Street MSCI ACWI IMI Index Securities Lending Fund	\$ 1,341,503,314
State Street U.S. Aggregate Bond Index Non-Lending Fund	694,859,507
<b>Total</b>	<b>\$ 2,036,362,821</b>

## Notes to Financial Statements

June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

#### G. Deposits and Investments (Continued)

##### Investments (Continued)

**Rate of Return** – The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. For the year ended June 30, 2023, the annual money-weighted rate of return on

pension plan investments, net of pension plan investment expense, was 8.78%.

**Interest Rate Risk** – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Agency does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. The summary shown below indicates that 88% of the Agency's investment maturities are one year or longer.

Investment Type	Total	Investment Maturities (In Years)			
		Less than 1	1 - 5	6 - 10	More than 10
Convertible preferred equities	\$ 62,952,059	\$ 13,016,115	\$ 23,804,448		\$ 26,131,496
U.S. Government obligations	109,988,382		32,421,206		77,567,176
Corporate obligations	1,244,481,439	17,642,330	866,137,542	\$ 286,845,829	73,855,738
Asset- and mortgage-backed securities	34,456,773	719,364	1,559,227	9,389,405	22,788,777
Fixed income funds	47,818,093		47,818,093		
Promissory notes	249,381,807				249,381,807
Collective investment trusts	1,332,895,585	387,606,667		945,288,918	
Private investments	562,557,447			562,557,447	
State recycling tax credits	129,552,000	17,552,000	64,000,000	48,000,000	
<b>Total</b>	<b>\$ 3,774,083,585</b>	<b>\$ 436,536,476</b>	<b>\$ 1,035,740,516</b>	<b>\$ 1,852,081,599</b>	<b>\$ 449,724,994</b>
<b>Securities Lending Collateral</b>					
Compass fund	\$ 400,742,431	\$ 400,742,431			

**Asset-Backed Securities** – As of June 30, 2023, ATRS held asset-backed securities with a fair value of \$24,253,352. These securities represent interests in various trusts consisting of pooled financial assets other than mortgage loans conveyed by the issuing parties. ATRS's ability to recover the amount of principal invested in these securities depends on the performance and quality of the trust assets.

**Mortgage-Backed Securities** – As of June 30, 2023, mortgage-backed securities had a fair value of \$4,311,661. The yields and maturities of mortgage-backed securities generally depend on when the underlying mortgage loan principal and interest are repaid. Although the full amount of principal will be received if prepaid, the interest income that would have been collected during the remaining period to maturity, net of any market adjustment, is lost.

**Corporate Bonds** – As of June 30, 2023, ATRS held corporate bonds with a fair value of \$373,987,489. Corporate bonds are debt instruments that are issued by private corporations. These bonds

have a term maturity and can have either a fixed or variable interest rate. Variable interest rate bonds have adjustments that are made periodically and vary directly with movements in interest rates.

**Convertible Corporate Bonds** – As of June 30, 2023, ATRS held convertible bonds with a fair value of \$870,493,950. Convertible bonds convey an option to the bondholder to exchange each bond for a specified number of shares of common stock of the corporation. Convertible bonds generally offer lower coupon rates and promised yields to maturity in exchange for the value of the option to trade the bond into stock.

**Promissory Notes** – ATRS also held 2 promissory notes with a fair value of \$249,381,807 at June 30, 2023. Promissory notes are a form of debt that companies use to raise money in exchange for payment of a fixed amount of periodic income at a specified date or on demand. One unsecured promissory note was issued to Big River Steel Holdings, LLC and one secured note was issued to Highland LP.



# Notes to Financial Statements

June 30, 2023

## NOTE 1: Summary of Significant Accounting Policies (Continued)

### G. Deposits and Investments (Continued)

#### Investments (Continued)

**Credit Risk** – Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The risk is measured by the credit quality of investments in

debt securities as described by nationally-recognized statistical rating organizations. A formal investment policy that limits investment in debt based on their statistical rating as a means of managing exposure to credit risk has not been adopted by the Agency.

As of June 30, 2023, the Agency's exposure to credit risk as rated by Standard and Poor's and Moody's Investor Service is as follows:

Standard and Poor's	
Rating	Total
AAA	\$ 929,440
AA	251,684,289
A	35,999,334
BBB	229,751,967
BB	114,136,252
B	52,721,138
CCC or below	18,339,677
Unrated	2,960,533,106
<b>Total</b>	<b>\$ 3,664,095,203</b>
<b>Securities Lending Collateral</b>	
Unrated	<b>\$ 400,742,431</b>

Moody's Investors Service	
Rating	Total
Aaa	
Aa	\$ 252,559,154
A	29,768,629
Baa	228,516,824
Ba	121,623,441
B	62,290,623
Caa or below	8,757,036
Unrated	2,960,579,496
<b>Total</b>	<b>\$ 3,664,095,203</b>
Unrated	<b>\$ 400,742,431</b>

**Custodial Credit Risk** – Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the Agency will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the Agency, and are held by either the counterparty or the counterparty's trust department or agent but not in the Agency's name. The Agency has adopted the State Board of Finance Policy requiring the use of depository insurance and collateralization procedures to manage the risk that investments may not be returned. As of June 30, 2023, none of the Agency's investments were exposed to custodial credit risk.

**Concentration of Credit Risk** – Concentration of credit risk is the risk of loss attributed to the magnitude of the Agency's investment in a single issuer (not including investments issued or explicitly guaranteed by the U.S. Government, investment in mutual funds, external investment pools, or other pooled investments). The Agency has not adopted a formal investment policy to limit the amount it may invest in any one issuer to manage the concentration of credit risk. As of June 30, 2023, none of the Agency's investments in any one issuer represent more than 5% of total investments.

**Foreign Currency Risk** – Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. The Agency does not have an investment policy that limits investment in foreign currency.

## Notes to Financial Statements

June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

#### G. Deposits and Investments (Continued)

##### Investments (Continued)

The Agency's exposure to foreign currency risk in U.S. dollars for investments and deposits at June 30, 2023, was as follows:

Currency		Fair Value	Cash Deposits	Investments						
				Equities	Fixed Income	Real Estate	Pooled Invest.	Alternative Invest.	Forward Contracts	Securities Lending
Argentine Peso	ARS	\$ 18,263	\$ 18,263							
Australian Dollar	AUD	4,507,900				\$ 4,507,900				
Brazilian Real	BRL	14,746,887	91,396	\$ 14,655,491						
British Pound	GBP	395,193,708	111,595	128,747,778		9,139,143	\$ 56,524,575		\$ 670,617	
Canadian Dollar	CAD	36,756,648	82,697	32,887,747			3,786,204			
Chilean Peso	CLP	4,434,814		4,434,814						
Chinese Yuan Renminbi	CNY	2,732,015	29	2,731,986						
Danish Krone	DKK	6,110,068		6,110,068						
Euro	EUR	559,653,531	(8,351)	455,211,541	\$ 1,824,510			\$ 99,117,348	3,508,483	
Hong Kong Dollar	HKD	129,441,399		126,081,073			3,429,805		(69,479)	
Indian Rupee	INR	396,609	396,609							
Indonesian Rupiah	IDR	1,613,503			1,613,503					
Japanese Yen	JPY	215,129,700	827,766	156,811,906					742,284	\$ 56,747,744
Mexican Peso	MXN	9,471,566		9,376,630					94,936	
New Taiwan Dollar	TWD	32,616,913	227,037	32,389,876						
Philippine Peso	PHP	3,852,817	12,746	3,840,071						
Singapore Dollar	SGD	-								
South African Rand	ZAR	12,041,441	65	10,583,703	1,457,673					
South Korean Won	KRW	43,758,303	16	43,421,364					336,923	
Swedish Krona	SEK	32,615,565	513	32,509,295					105,757	
Swiss Franc	CHF	49,766,472	518	49,451,532					314,422	
Thailand Baht	THB	4,324,778		4,324,778						
<b>Total</b>		<b>\$1,559,182,900</b>	<b>\$1,760,899</b>	<b>\$1,113,569,653</b>	<b>\$4,895,686</b>	<b>\$13,647,043</b>	<b>\$263,740,584</b>	<b>\$99,117,348</b>	<b>\$5,703,943</b>	<b>\$56,747,744</b>

For Forward Currency Contracts in the schedule above, a positive number represents the market value of contracts to purchase that currency in excess of the market value of contracts to sell that currency. A negative number, therefore, represents the market value of contracts to sell foreign currency in excess of contracts to purchase that currency.

**Derivatives** – Derivative instruments are financial contracts or agreements whose values depend on the values of one or more underlying assets, reference rates, and/or financial indexes. Derivative instruments include futures contracts, forward contracts, swap contracts, options contracts, forward foreign currency exchange and rights. ATRS investment guidelines state that derivatives may be used to reduce the risk in a

portfolio but should not be used to create a position of leverage or substantially increase the risk of the overall portfolio. Futures and options should be matched by cash or cash equivalent securities, and all short futures positions should be matched by equivalent long security positions. Each investment manager's derivative usage is specified in the investment management agreement or specific guidelines.

## Notes to Financial Statements

June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

#### G. Deposits and Investments (Continued)

##### Investments (Continued)

At June 30, 2023, the fair value balance of derivative instruments and the changes in fair value for the year then ended, were as follows:

Type	Changes in Fair Value		Fair Value at June 30, 2023	
	Classification	Amount	Classification	Amount
Foreign currency forwards	Investment income	\$ (28,255)	Investments	\$ (17,622)

**Foreign Currency Forwards** – ATRS enters into various currency contracts to manage exposure of foreign portfolio holdings to changes in foreign currency exchange rates. A forward exchange contract is a commitment to purchase or sell a foreign currency at a future date at a negotiated forward rate. Risks associated with such contracts include movement in the value of the foreign currency relative to the U.S. dollar and the ability of the counterparty to perform. The contracts are valued at forward exchange rates, and the changes in value of open contracts are recognized as unrealized appreciation (depreciation) in fair value of investments, a component of investment income, in the statement of changes in plan net position. The realized gain or loss on closed forward currency contracts represents the difference between the value of the

original contracts and the closing value of such contracts and is included in net appreciation (depreciation) in fair value of investments, a component of investment income, in the statement of changes in plan net position. At June 30, 2023, ATRS had outstanding forward exchange currency contracts to purchase foreign currencies with contract amounts of \$4,073,058 and market values of \$4,075,742, resulting in a net gain of \$2,684. Outstanding forward exchange currency contracts to sell foreign currencies with contract amounts of \$2,228,658 had market values of \$2,248,966, resulting in a net loss of \$20,306.

The net fair value and net notional amounts of foreign currency forwards as of June 30, 2023 were as follows:

Foreign Currency Forwards	Fair Value at June 30, 2023	
	Fair Value	Net Notional
Swiss Franc	\$ (1,507)	CHF 281,298
Euro	(18,836)	EUR 1,483,000
Hong Kong Dollar	36	HKD 2,432,349
United States Dollar	2,685	USD 4,073,058
<b>Totals</b>	<b>\$ (17,622)</b>	

**Securities Lending Transactions** – Arkansas Code Annotated and Board policy permit ATRS to participate in a securities lending program administrated by State Street Bank (the "Custodian"). The Custodian enters into agreements with broker-dealers or other entities to loan securities for collateral with a simultaneous agreement to return the collateral for the same securities in the future. There were no restrictions on the dollar amount of securities loaned by ATRS. Securities on loan to participating brokers at year-end include U.S. Government

securities, corporate securities, and international securities. Brokers who borrow the securities provide cash or other collateral, including securities issued or guaranteed by the U.S. Government. Collateral must be provided in the amount of at least 100% of the market value of the loaned securities. ATRS cannot pledge or sell collateral securities received unless the borrower defaults. The cash collateral received on each loan is invested in a collective investment fund comprised of a liquidity pool and a duration pool.

# Notes to Financial Statements

June 30, 2023

## NOTE 1: Summary of Significant Accounting Policies (Continued)

### G. Deposits and Investments (Continued)

#### Investments (Continued)

As of June 30, 2023, the liquidity pool had an average duration of 7.15 days and an average weighted final maturity of 107.11 days for USD collateral. Because the loans are terminable at will, their duration generally will not match the duration of the investments made with cash collateral.

At year-end, ATRS had no credit risk exposure to borrowers due to the custodian's indemnification agreement to purchase replacement securities or return cash collateral in the event a borrower fails to return a loaned security or fails to pay the Agency for income of the securities while on loan. No borrowers failed to return loaned securities or pay distributions during the year. Investments made with cash collateral appear as an asset on the Statement of Plan Net Position. Corresponding liabilities are recorded, as ATRS must return the cash collateral to the borrower upon expiration of the loan.

ATRS is exposed to investment risk, including the possible loss of principal value in the cash collateral pool, due to fluctuation

in the market value of the assets held by the cash collateral pool. As of June 30, 2023, the fair value of the securities lending assets exceeded the securities lending liabilities by \$41,673.

### H. Capital Assets

Capital assets purchased (or leased) and in the custody of this Agency were recorded as expenditures at the time of purchase (lease inception). Assets with costs exceeding \$5,000 and an estimated useful life exceeding one year are reported at historical cost, including ancillary costs (such as professional fees and costs, freight costs, preparation or setup costs, and installation costs). Only leases in excess of \$25,000 with non-State entities were recorded in the statewide accounting system. Gifts or contributions are generally recorded in the accounts at acquisition value at the time received. Acquisition value is the market value if the Agency would have purchased the item. Depreciation is reported for capital assets based on a straight-line method, with no salvage value. Estimated useful lives generally assigned are as follows:

Assets: Equipment  
Years: 5-20

Capital assets activity for the year ended June 30, 2023, was as follows:

	Beginning Balance	Additions	Retirements	Ending Balance
<b>Fiduciary activities:</b>				
Equipment	\$ 921,936			\$ 921,936
Less: Accumulated depreciation	832,222	\$ 16,218		848,440
<b>Fiduciary activities, net</b>	<b>\$ 89,714</b>	<b>\$ (16,218)</b>	<b>\$ 0</b>	<b>\$ 73,496</b>

### I. Compensated Absences – Employee Leave

Annual leave is earned by all full-time employees. Upon termination, employees are entitled to receive compensation for their unused accrued annual leave up to 30 days. Liabilities for compensated absences are determined at the end of the year based on current salary rates.

Sick leave is earned by all full-time employees and may be accrued up to 120 days. Compensation up to a maximum of

\$7,500 for unused sick leave is payable to employees upon retirement.

Compensated absences payable attributable to this Agency's employee annual and sick leave as of June 30, 2023 and 2022, amounted to \$554,664 and \$602,734, respectively. The net changes to compensated absences payable during the year ended June 30, 2023, amounted to \$48,070.

# Notes to Financial Statements

June 30, 2023

## NOTE 1: Summary of Significant Accounting Policies (Continued)

### J. Post-Employment Benefits Other Than Pensions (OPEB)

#### Arkansas State Employee Health Insurance Plan (Plan)

**Plan Description** – The Department of Transformation and Shared Services – Employee Benefits Division (DTSS-EBD) provides medical and prescription drug benefits for eligible state employees and retirees. Policies for DTSS-EBD related to medical and prescription drug plans are established by the State Board of Finance (Board) and may include ad hoc benefit changes or annual cost redeterminations. For the current year, no ad hoc or cost redetermination changes occurred. The Constitution of Arkansas, Article 5, vests the General Assembly with legislative power to enact and amend duties of and benefit provisions of the Board and DTSS-EBD, respectively, as published in Subchapter 4, Chapter 5 of Title 21 of the Arkansas Code Annotated. DTSS-EBD is included in the State of Arkansas’s Annual Comprehensive Financial Report (ACFR), which includes all applicable financial information, notes, and required supplementary information. That report may be obtained by writing to Department of Transformation and Shared Services, 501 Woodlane, Suite 201, Little Rock, Arkansas 72201 or by calling 501-319-6565.

The Agency contributes to the Plan, a single employer defined benefit OPEB plan administered by DTSS- EBD, on a monthly basis. The Board establishes medical and prescription drug benefits for three classes of covered individuals: active employees, terminated employees with accumulated benefits, and retirees and beneficiaries. The Plan is established on the basis of a pay-as-you-go financing requirement, and no assets are accumulated in a trust, as defined by Governmental Accounting Standards Board (GASB) Statement No. 75. The State’s annual OPEB cost for the Plan is based on an actuarially-determined calculated amount made in accordance with GASB Statement No. 75.

**Funding Policy** – Employer contributions to the Plan are established by Ark. Code Ann. § 21-5-414 and may not exceed \$550 per budgeted position. Employees, retirees, and beneficiaries contribute varying amounts based on the type of coverage and inclusion of family members. Benefits for Medicare-eligible retirees are coordinated with Medicare Parts A and B, and the Plan is the secondary payer. The portion of the State’s annual OPEB liability attributable to ATRS as of June 30, 2023, is \$3,248,593.

### K. Deferred Outflows of Resources and Deferred Inflows of Resources

Deferred outflows of resources represent a decrease of net position that applies to future periods. Thus, these items will not be recognized as an outflow of resources (an expense or expenditure) until a future period.

Deferred inflows of resources represent an increase of net position that applies to future periods. These items will not be recognized as an inflow of resources (revenue) until a future period.

### L. Contributions

The Agency’s funding policy provides for periodic employer contributions at statutorily-established rates based on annual actuarial valuations. The employer contribution rate was 15% for the fiscal year ending June 30, 2023. Contributory members are required to contribute 7% of gross wages to ATRS. Employee contributions are refundable if ATRS-covered employment terminates before a monthly benefit is payable. Employee contributions remaining on deposit with ATRS for a period of one or more years earn interest credits, which are included in the refund.

### M. Reserves

In accordance with the provisions of Ark. Code Ann. § 24-7-405, ATRS must maintain reserve accounts showing plan net position available for benefits. At June 30, 2023, the reserve accounts were funded at a level that complied with the code provisions.

	<b>Total</b>
Members’ deposit account reserve	\$ 13,545,105,953
Employers’ accumulation account reserve	(7,256,465,541)
Retirement reserve	13,893,055,060
Teacher deferred retirement option plan account reserve	371,192,749
Survivor benefit account reserve	112,186,981
Income - expense account reserve	9,976,716
<b>Total</b>	<b>\$ 20,675,051,918</b>

# Notes to Financial Statements

June 30, 2023

## NOTE 1: Summary of Significant Accounting Policies (Continued)

### M. Reserves (Continued)

The Code provisions define each of the reserve accounts as follows:

**Members' Deposit Account Reserve** – The account in which members' contributions shall be accumulated with regular interest and from which shall be made transfers and refunds of contributions.

**Employers' Accumulation Account Reserve** – The account in which shall be accumulated the employer's contributions to ATRS and from which shall be made transfers as provided in the code.

**Retirement Reserve** – The account from which shall be paid all annuities and benefits in lieu of annuities payable as provided in this act to retirants who retired on account of superannuation or disability and to beneficiaries of such retirants.

**Teacher Deferred Retirement Option Plan Account Reserve** – The account in which shall be accumulated plan deposits made on behalf of the member with plan interest.

**Survivor Benefit Account Reserve** – The account from which shall be paid survivor benefits payable as provided in this act.

**Income - Expense Account Reserve** – The account to which shall be credited all investment income from invested assets of ATRS. It shall also be the account in which shall be accumulated the contributions made by employers for the administrative expenses of ATRS, from which shall be made annual transfers of interest credits and excess amounts to the other accounts of ATRS, and from which shall be paid all the expenses of the Board necessary for the administration and operation of ATRS.

## NOTE 2: Net Pension Liability

The components of the net pension liability of the participating employers at June 30, 2023, were as follows:

Total pension liability	\$ 25,864,207,765
Plan net position	<u>(20,675,051,918)</u>
<b>Net pension liability</b>	<b><u>\$ 5,189,155,847</u></b>
 Plan net position as a percentage of the total pension liability	 79.94%

**Actuarial Assumptions** – The total pension liability was determined by an actuarial valuation as of June 30, 2023, using the following actuarial assumptions, applied to all prior periods included in the measurement:

Wage inflation rate	2.75%
Salary increases	2.75 - 5.75%
Investment rate of return	7.25%
 Mortality table	 Pub-2010 General Healthy Retired, General Disabled Retiree, and General Employee Mortality amount weighted tables were used for males and females. Mortality rates were adjusted for future mortality improvements using projection scale MP-

Table	Scaling Factor	
	Males	Females
Healthy Retirees	105%	105%
Disabled Retirees	104%	104%
Active Members	100%	100%

The actuarial assumptions used in the June 30, 2023, valuation were based on the results of an actuarial experience study for the period July 1, 2015 through June 30, 2020.

## Notes to Financial Statements

June 30, 2023

### NOTE 2: Net Pension Liability (Continued)

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major class. These ranges are combined to produce the long-term expected rate of

return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return were adopted by the plan's trustees after considering input from the plan's investment consultant and actuary.

For each major asset class that is included in the pension plan target asset allocation as of June 30, 2023, these best estimates are summarized in the following table:

Asset Allocation	Target	Long-Term Expected Real Rate of Return
Total equity	53.0%	5.0%
Fixed income	15.0%	1.8%
Alternatives	5.0%	4.8%
Real assets	15.0%	4.5%
Private equity	12.0%	7.3%
Cash equivalents	0.0%	1.0%
	100%	

**Single Discount Rate** – A single discount rate of 7.25% was used to measure the total pension liability based on the expected rate of return on pension plan investments. The fiscal year 2023 member and employer contribution rates are 7% and 15% of active member payroll, respectively. The projection of cash flows used to determine this single discount rate assumed that member and employer contributions will be made in accordance with this schedule. This includes payroll for current T-DROP participants and Return to Work retirees. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit

payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 7.25%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1% lower or 1% higher than the current rate:

	Sensitivity of the Net Pension Liability to the Single		
	1% Decrease 6.25%	Current Rate 7.25%	1% Increase 8.25%
Net pension liability	\$ 8,428,056,331	\$ 5,189,155,847	\$ 2,503,858,115

### NOTE 3: Required Supplementary Schedules

Detailed historical information about the pension liabilities for which the pension plan's assets are being held and managed and the significant assumptions used to measure these

liabilities are required supplementary information. This required supplementary information, prepared in accordance with the parameters of GASB Statement No. 67, is included immediately following the notes to the financial statements.

# Schedule of Changes in Net Pension Liability and Related Ratios

for the Ten-Year Period Ended June 30, 2023

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
<b>Total Pension Liability</b>										
Service cost	\$395,700,338	\$ 379,257,685	\$340,401,007	\$331,035,218	\$ 325,464,537	\$ 315,864,318	\$ 307,786,503	\$ 305,086,337	\$ 298,134,477	\$ 326,999,276
Interest	1,772,097,027	1,720,782,101	1,655,575,883	1,608,463,162	1,551,511,422	1,504,613,059	1,485,759,965	1,433,768,167	1,371,168,271	1,326,709,192
Changes in benefit terms							(469,205,711)			(27,405,705)
Difference between actual and expected experience	164,573,721	4,880,583	108,860,237	(24,869,157)	119,427,343	(7,365,993)	(76,812,667)	(15,341,738)	12,351,905	(103,017,525)
Changes in assumptions			887,447,380				1,374,950,899			
Benefit payments	(1,413,477,760)	(1,374,220,915)	(1,308,163,750)	(1,255,065,793)	(1,205,326,555)	(1,160,738,238)	(1,092,952,357)	(1,035,958,950)	(970,719,484)	(914,250,015)
Refunds	(12,583,757)	(10,426,792)	(9,463,375)	(9,592,091)	(9,679,783)	(9,455,405)	(10,874,003)	(10,145,471)	(10,774,122)	(10,485,103)
<b>Net Change in Total Pension Liability</b>	906,309,559	720,282,662	1,674,657,382	649,971,339	781,396,964	642,917,741	1,518,652,629	677,408,345	811,328,197	598,550,120
<b>Total Pension Liability - Beginning of Year</b>	24,957,898,206	24,237,615,544	22,562,958,162	21,912,986,823	21,131,589,859	20,488,672,118	18,970,019,489	18,292,611,144	17,481,282,947	16,882,732,827
<b>Total Pension Liability - End of Year (A)</b>	<b>\$ 25,864,207,765</b>	<b>\$ 24,957,898,206</b>	<b>\$ 24,237,615,544</b>	<b>\$ 22,562,958,162</b>	<b>\$ 21,912,986,823</b>	<b>\$ 21,131,589,859</b>	<b>\$ 20,488,672,118</b>	<b>\$ 18,970,019,489</b>	<b>\$ 18,292,611,144</b>	<b>\$ 17,481,282,947</b>
<b>Plan Net Position</b>										
Contributions - employer	\$536,619,031	\$ 501,522,604	\$ 472,567,147	\$ 446,228,128	\$ 430,864,656	\$ 424,488,126	\$ 414,954,939	\$ 410,358,229	\$ 408,230,472	\$ 404,920,440
Contributions - member	200,610,721	183,315,252	168,129,972	153,105,134	141,885,632	138,766,747	133,109,939	131,100,983	128,555,684	125,225,906
Net investment income	1,692,309,263	(1,590,291,257)	5,250,953,451	(1,657,766,491)	898,384,867	1,824,094,695	2,289,818,591	35,579,657	632,166,951	2,429,334,097
Benefit payments	(1,413,477,760)	(1,374,220,915)	(1,308,163,750)	(1,255,065,793)	(1,205,326,555)	(1,160,738,237)	(1,092,952,357)	(1,035,958,950)	(970,719,484)	(914,250,015)
Refunds	(12,583,757)	(10,426,792)	(9,463,375)	(9,592,091)	(9,679,783)	(9,455,405)	(10,874,003)	(10,145,471)	(10,774,122)	(10,485,103)
Administrative expense	(7,992,822)	(6,650,604)	(7,326,797)	(8,454,436)	(7,134,784)	(9,336,430)	(7,825,595)	(8,059,030)	(8,034,857)	(8,034,236)
Other		507,446,092								
<b>Net Change in Plan Net Position</b>	995,584,566	(1,789,305,620)	4,566,696,648	(839,545,549)	2,489,994,033	1,207,819,496	1,726,231,514	(477,124,582)	179,424,644	2,026,711,089
<b>Plan Net Position - Beginning of Year</b>	19,679,467,252	21,468,772,872	16,902,076,224	17,741,621,773	17,492,627,740	16,284,808,244	14,568,576,730	15,035,701,312	14,856,276,668	12,829,565,579
<b>Plan Net Position - End of Year (B)</b>	<b>\$ 20,675,051,918</b>	<b>\$ 19,679,467,252</b>	<b>\$ 21,468,772,872</b>	<b>\$ 16,902,076,224</b>	<b>\$ 17,741,621,773</b>	<b>\$ 17,492,627,740</b>	<b>\$ 16,284,808,244</b>	<b>\$ 15,035,701,312</b>	<b>\$ 15,035,701,312</b>	<b>\$ 14,856,276,668</b>
<b>Net Pension Liability - End of Year (A) - (B)</b>	<b>\$ 5,189,155,847</b>	<b>\$ 5,278,430,954</b>	<b>\$ 2,768,842,672</b>	<b>\$ 5,660,881,938</b>	<b>\$ 4,171,365,050</b>	<b>\$ 3,639,962,119</b>	<b>\$ 4,203,863,874</b>	<b>\$ 4,411,442,759</b>	<b>\$ 3,256,909,832</b>	<b>\$ 2,625,005,279</b>
Plan net position as a percentage of total pension liability	79.94%	78.85%	88.58%	74.91%	80.96%	82.78%	79.48%	76.75%	82.20%	84.98%
Covered employee payroll	\$ 3,492,029,158	\$ 3,320,346,417	\$ 3,204,720,806	\$ 3,077,558,814	\$ 3,027,154,131	\$ 2,986,025,715	\$ 2,921,965,125	\$ 2,888,392,668	\$ 2,873,988,053	\$ 2,850,860,174
Net pension liability as a percentage of covered employee payroll	148.60%	158.97%	86.40%	183.94%	137.80%	121.87%	143.87%	152.73%	113.32%	92.08%

\* ATRS is only required to present those years for which information is available until the full 10-year trend is completed.



## Schedule of Contributions

for the Ten-Year Period Ended June 30, 2023

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially-determined contribution	\$ 547,709,158	\$ 493,022,221	\$ 474,196,689	\$ 450,612,124	\$ 447,791,482	\$ 422,366,686	\$ 423,846,831	\$ 437,434,470	\$ 474,773,530	\$ 485,904,529
Actual contribution	536,619,031	501,522,604	472,567,147	446,228,128	430,864,656	424,488,126	414,954,939	410,368,229	408,230,472	404,920,440
<b>Contribution deficiency (excess)</b>	<b>\$ 1,090,127</b>	<b>\$ (9,500,383)</b>	<b>\$ 1,629,542</b>	<b>\$ 4,383,996</b>	<b>\$ 16,926,826</b>	<b>\$ (2,122,441)</b>	<b>\$ 8,891,892</b>	<b>\$ 27,076,241</b>	<b>\$ 66,543,058</b>	<b>\$ 80,984,089</b>
Covered employee payroll	\$ 3,492,029,158	\$ 3,320,346,417	\$ 3,204,720,806	\$ 3,077,588,814	\$ 3,027,154,131	\$ 2,986,026,715	\$ 2,921,965,125	\$ 2,886,392,668	\$ 2,873,988,063	\$ 2,850,860,174
Actual contribution as a percentage of covered employee payroll	15.37%	15.10%	14.75%	14.50%	14.23%	14.22%	14.20%	14.21%	14.20%	14.20%

## Schedule of Investment Returns

for the Ten-Year Period Ended June 30, 2023

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return	8.78%	-5.15%	31.82%	-0.96%	5.25%	11.46%	16.09%	0.24%	4.34%	19.27%

# Notes to Required Supplementary Information

June 30, 2023

## NOTE 1: Summary of Significant Information Related to Required Supplementary Schedules

### A. Schedule of Contributions

#### 1. Changes in Benefit Terms

There were no significant changes in benefit terms for the year ended June 30, 2023.

#### 2. Changes in Assumptions

There were no significant changes in assumptions for the year ended June 30, 2023.

#### 3. Methods and Assumptions Used in Calculations of Actuarially-Determined Contributions

Valuation date: June 30, 2021

Actuarially determined contribution rates are calculated as of June 30 in the year which is one year prior to the beginning of the fiscal year in which contributions are reported.

The following actuarial methods and assumptions were used to determine contribution rates reported in the schedule of contributions:

Actuarial cost method	Entry age normal; funding to retirement
Amortization method	Level percentage of payroll
Amortization period	30 years
Asset valuation method	4-year smoothed market for funding purposes ; 20% corridor
Payroll growth	2.75%
Salary increases	2.75 to 5.75% including inflation
Investment rate of return	7.25%

Mortality table Pub-2010 General Healthy Retired, General Disabled Retiree, and General Employee Mortality amount weighted tables were used for males and females. Mortality rates were adjusted for future mortality improvements using projection scale MP-2020 from 2010.

Table	Scaling Factor	
	Males	Females
Healthy Annuitant	105%	105%
Disabled Annuitant	104%	104%
Employee Mortality	100%	100%

## Schedule of Selected Information

for the Five-Year Period Ended June 30, 2023

	2023	2022	2021	2020	2019
Total Assets	\$ 21,177,931,966	\$ 20,501,229,577	\$ 22,005,819,561	\$ 17,272,901,062	\$ 18,281,516,802
Total Deferred Outflows of Resources	493,831	685,899	1,034,149	1,310,404	
Total Liabilities	501,713,964	820,378,162	537,941,055	371,416,146	539,895,029
Total Deferred Inflows of Resources	1,659,915	2,070,062	139,784	719,096	
Net Position Restricted for Pension Benefits	20,675,051,918	19,679,467,252	21,468,772,871	16,902,076,224	17,741,621,773
Total Additions (Losses)	2,429,539,015	(398,007,308)	5,891,652,600	433,570,198	1,471,135,154
Total Deductions	1,433,954,349	1,391,298,311	1,324,955,953	1,273,115,747	1,222,141,121



# Investments



March 1, 2024

Board of Trustees  
Arkansas Teacher Retirement System  
1400 West Third Avenue  
Little Rock, AR 72201

### Market Overview

Investors entered fiscal year 2023 amongst a very challenging market environment, with both bonds and equities continuing to be pressured. The U.S. Federal Reserve ("Fed"), amongst other central banks, continued to combat high inflation with sharp interest rate hikes. Throughout the year, sentiment appeared to cycle through optimism on achieving a soft landing, to the reality that inflation is still above the Fed's long-term target of 2% and further hikes could lead to a recession. In June of 2022, U.S. headline inflation (CPI) peaked at 8.9% year-over-year. In response to persistently high inflation and a still strong U.S. economy, the Fed continued its rate hiking cycle with three additional 75 basis point (bp) hikes, followed by a 50bp hike in December and three 25bp hikes in the back half of the year. This represents the fastest hiking cycle since the late 1980s. However, by mid-fiscal year, there was confidence in a declining inflationary environment that shifted sentiment.

Headline U.S. inflation showed a steady decline from its peak to end the 2023 fiscal year at 3.0% year-over-year. The declining trend in inflation was followed by a slowing pace of rate hikes by the Fed and offered a source of relief to investors. As a result, risk appetite picked up and was supported by a generally resilient economy and expectations of an interest rate pivot later in 2023. This positive outlook wasn't accepted by everyone, however, as the yield curve remained inverted throughout the year, which has historically signaled a looming recession, and prospects for any rate cuts in the near term has since proven to be premature.

Markets were also tested in the back half of the year through a regional banking crisis and the U.S. debt ceiling debacle. In March 2023, Silicon Valley Bank (SVB) entered receivership with the Federal Deposit Insurance Corporation (FDIC), due to inadequate liquidity and solvency protection, and represents the largest failure of a bank since the GFC. Shortly after SVB's demise, investor concerns regarding Credit Suisse accelerated. Regulators swiftly stepped in with the FDIC fully protecting all depositors and launching the new Bank Term Funding Program to provide liquidity should banks require it. Swiss regulators also stepped in quickly to broker a deal between with UBS buying Credit Suisse at a significant discount. Despite all the chaos,

a broader banking crisis was avoided and markets emerged mostly unscathed. The stalemate during the debt ceiling negotiations also threatened to destabilize markets, yet investor confidence remained relatively stable through the ordeal until a resolution was passed.

Despite a rough start to the year, fiscal year 2023 ended on a more positive tone as year-over-year inflation fell throughout the year and economic readings held up stronger than expected. Global equities, as defined by the MSCI All Country World IMI Index, rose 16.1% for the year ending June 30, 2023. Developed markets, both the U.S. and non-U.S. generated strong returns of 18.9% and 18.8%, as measured by the DJ U.S. Total Stock Market Index and the MSCI EAFE Index, respectively. Emerging markets struggled in the high inflation and rising rate environment, returning 1.8% in USD terms. Driven by the Fed rate tightening magnitude and pace, yields rose sharply in the first few months, then traded range bound for the remaining part of the year. The impact on investment grade returns was relatively muted, as the Bloomberg Aggregate Bond Index declined by 0.9%. As risk-appetite returned, high yield bonds performed well and returned 9.1% over the year, as measured by the Bloomberg U.S. Corporate High Yield Index. Private markets weren't as favorable due to the lag in valuations which came in low, and in places negative, during the year. Overall, more risk-oriented portfolios generally delivered positive mid to high single digit total returns for the 2023 fiscal year period.

### Overview of ATRS Fund Structure

The ATRS portfolio is well-diversified across several asset classes, including global public equities, fixed income, alternative investments, real assets, and private equity. The asset allocation is a long-term Policy determined through periodic asset-liability studies and assessments of risk and liquidity needs. Within these asset classes, the investments are diversified across investment types, styles, regions and vintage years. A variety of investment firms are employed within each category to minimize manager- and firm-specific risks. We continue to believe the diversification and overall risk level of the portfolio is appropriate given the goals and objectives of the ATRS.

During the 2023 fiscal year there were no changes to the ATRS target asset allocation. However, ATRS did make modest enhancements within the Total Equity, Fixed Income and Opportunistic/ Alternatives portfolios. Modifications within the Total Equity asset class were a result of a manager and structure review and included replacing two active strategies, where conviction had waned, with a new strategy that brings a diversified active approach to the portfolio. In addition, the portfolio changes replenished the liquidity source and balanced exposure via size and region towards a more globally oriented portfolio. The resulting equity portfolio offers a more streamlined lineup across high conviction active managers with a lower cost profile and a balanced contribution to active risk. Within Fixed Income, ATRS increased its exposure to duration by removing an absolute return strategy and re-allocating to existing managers

with more market-like duration. The resulting portfolio allows ATRS to benefit from the higher rate environment while also providing its intended risk reducing characteristics. Finally, there were two additions to the Opportunistic/Alternative portfolio, as ATRS continues to build out the portfolio to offer compelling and diversified returns. The ATRS Board approved a second opportunistic credit strategy with an existing manager and an allocation to a mortgage servicing rights strategy which seeks to capitalize on the current market environment and to provide uncorrelated, double-digit returns.

Aon and the ATRS Investment Team continue to regularly review the portfolio allocation, structure and manager line-up, and evaluate additional types of strategies in order to best position the fund to achieve its investment objectives.

**ATRS Performance Overview (annualized returns)**

Periods ending 6/30/2023	1 Year		3 Year		5 Year	
	Return	Rank	Return	Rank	Return	Rank
<b>Total Fund</b>	<b>9.2%</b>	<b>18</b>	<b>11.5%</b>	<b>5</b>	<b>7.5%</b>	<b>12</b>
Performance Benchmark	9.2	18	10.0	16	7.8	8
<b>Total Equity</b>	<b>15.7</b>	<b>53</b>	<b>13.9</b>	<b>17</b>	<b>7.6</b>	<b>49</b>
Performance Benchmark	17.0	42	11.8	35	8.8	34
<b>Total Fixed Income</b>	<b>1.4</b>	<b>--</b>	<b>-1.1</b>	<b>--</b>	<b>1.8</b>	<b>--</b>
Performance Benchmark	0.0	--	-3.4	--	1.0	--
<b>Total Opportunistic/Alternatives</b>	<b>7.9</b>	<b>--</b>	<b>6.1</b>	<b>--</b>	<b>2.4</b>	<b>--</b>
Custom Alternatives Benchmark	4.4	--	5.1	--	2.9	--
<b>Total Real Assets<sup>1</sup></b>	<b>1.5</b>	<b>--</b>	<b>7.2</b>	<b>--</b>	<b>6.2</b>	<b>--</b>
Total Real Assets Benchmark	1.7	--	8.1	--	6.8	--
<b>Total Private Equity<sup>1</sup></b>	<b>2.1</b>	<b>--</b>	<b>16.6</b>	<b>--</b>	<b>13.4</b>	<b>--</b>
Private Equity Policy	-6.9	--	20.7	--	12.5	--

<sup>1</sup>Returns for Private Markets are calculated using Time-Weighted Rate of Returns (TWRs) and are reported on a one-quarter lag.

The Total Fund ended the fiscal year with approximately \$20.7 billion, representing an increase of approximately \$1.0 billion over the year. Investment gains of approximately \$1.8 billion drove the strong increase in assets. The 2023 fiscal year brought strong returns across public equity markets, which drove strong absolute returns for the Total Fund which returned 9.2%, net-of-fees. Total Equity returned 15.7% and the Opportunistic/ Alternatives portfolio returned 7.9% over the year, both which buoyed more modest results across the rest of the portfolio. On a relative basis, the Total Fund performed in line with its performance benchmark, as Private Equity, reported on a one

quarter lag, held up better than its public market benchmark, and the Fixed Income portfolio outperformed as well. Offsetting outperformance was an overweight allocation to Private Equity relative to policy and some underperformance from Total Equity over the year. Relative to a peer group of U.S. Public Pension Plans with assets over \$1 billion, the ATRS portfolio ended the year ranking in the top quartile of its peer group. Longer-term performance also remains positive, as the Total Fund returned an annualized 7.5% over the five-year period and 8.8% over the ten-year period and ranked near the top decile of the peer universe over the three-, five- and ten-year periods.

The largest exposure of the portfolio, Total Equity, which provides exposure to U.S. and International equity markets, returned 15.7% over the year and drove the strong absolute performance of the Total Fund. On a relative basis, the ATRS Total Equity portfolio trailed its benchmark return of 17.0%, primarily due to a modest bias to small cap securities which trailed their medium and larger cap counterparts. Additionally, exposure to the convertible bond strategy, which tends to lag in strong risk on markets, was also a headwind to relative performance over the year. Longer-term absolute performance remains strong, as Total Equity returned an annualized 7.6% and 8.4% return over the trailing 5-year and since inception (7/2015) periods, respectively.

The ATRS fixed income portfolio returned a modest 1.4% over the fiscal year, though outperformed its benchmark, the Bloomberg Universal Index, which was flat for the year. The ATRS portfolio's lower duration positioning (less interest rate sensitivity) was beneficial as interest rates rose. Additionally, strong performance from two active managers in the risk-on environment was also beneficial to relative performance. Despite muted longer-term performance of 1.8% and 2.6% over the trailing 5- and 10-year periods, respectively, ATRS's fixed income portfolio added an annualized 0.8 percentage points of value-add above its benchmark over both times periods.

The opportunistic/alternatives portfolio produced a strong absolute return of 7.9% for the fiscal year, while also outperforming its benchmark by 3.5 percentage points. Strong returns were widespread across activist, equity insurance risk premium, global macro, and opportunistic and distressed credit strategies, and on both an absolute and relative basis. During the year, twelve out of fifteen strategies outperformed their

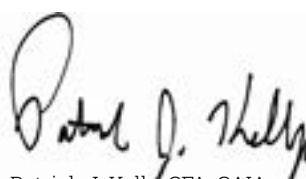
respective benchmarks. It is also important to note that this portfolio has many strategies early in their investment lives as there have been several enhancements made to this portfolio over recent years. Longer-term performance is mixed, though the portfolio has outperformed its benchmark over the trailing 10-year and since inception (5/2011) time periods.

The real assets category, which includes real estate, timber, agriculture, and infrastructure, returned 1.5% during the fiscal year, modestly trailing its performance benchmark (1.7%). The real estate allocation which is approximately 58% of the portfolio declined 3.5%, outperforming its benchmark return of -3.9%. The infrastructure portfolio, still relatively young, returned 12.6% over the year and outperformed its benchmark (10.2%). Timber returned 7.1%, trailing its benchmark (11.3%), while Agriculture returned 10.1% and outperformed its benchmark (9.1%). Over the long-term, the real assets portfolio has been additive from both an absolute and relative perspective.

The ATRS private equity portfolio returned 2.1% on a time-weighted return basis during the fiscal year. Despite a muted return, the portfolio notably outperformed its public equity benchmark (U.S. equity stock market plus a 2%), which declined 6.9% for the 2023 fiscal year as it represents public markets on a one-quarter lag. Over the long-term, the private equity portfolio has exceeded this performance benchmark by an annualized 1.7 percentage points, earning 12.6% since inception (4/1997).

We are pleased to report on the great success of the ATRS portfolio and feel it is well positioned going-forward to achieve its long-term goals.

Sincerely,



Patrick J. Kelly, CFA, CAIA  
Partner



Katie Comstock  
Partner

## Investment Policies and Procedures

Amended: October 4, 2010 | February 7, 2011 | June 3, 2013 | October 7, 2013 | February 17, 2014 | June 1, 2015  
April 21, 2016 | November 13, 2017 | April 1, 2019 | February 3, 2020 | December 7, 2020 | June 7, 2021

### Statement Of Investment Policy

This Investment Policy has been prepared within the context of applicable Arkansas laws and is intended to allow for sufficient flexibility in the investment process to capture opportunities, yet ensure that both prudence and care are maintained in the execution of the investment program. While safety of principal is given primary consideration, the Arkansas Teacher Retirement System Board of Trustees, hereinafter "Board" may take appropriate levels of risk to earn higher levels of investment return.

The Board has arrived at this policy through careful study of the rates of return and risks associated with various investment strategies in relation to the current and projected liabilities of the Arkansas Teacher Retirement System, hereinafter, "the System". This policy has been chosen as the most appropriate for achieving the financial objectives of the System. The policy will be reviewed periodically as circumstances dictate.

The Board has adopted a long-term investment horizon so that the chances and duration of investment losses are carefully weighed against the long-term potential for appreciation of assets. The assets of the System will be invested in a manner that provides the safeguards and diversity to which a prudent investor would adhere. All transactions undertaken on behalf of the System will be in the sole interest of the members of the System.

To achieve the overall investment goal of the System, one or more investment consultants may be retained by the Board as investment advisors. The scope of duties, together with the terms and conditions of engagement, of any investment consultant will be set forth in a contract approved by the Board. Throughout this document, investment advisors are referred to as investment consultants.

The System shall manage those assets not specifically allocated to investment managers. No investment shall be made without an investment consultant's recommendation. The System shall not approve any material changes in any direct investment without first receiving written advice/ recommendation from a third-party investment consultant and, if needed, outside legal

counsel, and, without thereafter receiving written approval by the Investment Committee and Board.

### Standard of Care

The standard of care for the Board and Executive Director of the assets of the System is: when investing and reinvesting trust assets and in acquiring, retaining, managing and disposing of investments of the trust assets, there shall be exercised the reasonable care, skill, and caution that a prudent investor would use after considering the purposes, terms, distribution requirements, and other circumstances of the trust. Investment and management decisions respecting individual assets shall be evaluated not in isolation but in the context of the trust portfolio as a whole and as a part of an overall investment strategy having risk and return objectives reasonably suited to the trust. The investments of the trust shall be diversified unless the Board reasonably determines that, because of special circumstances, the purposes of the trust are better served without diversifying. The trust assets shall be invested and managed solely in the interest of the members and benefit recipients of the trust. The trust assets shall be invested in a manner to only incur costs that are appropriate and reasonable in relation to the assets and purposes of the investment. Compliance with the standard of care is determined in light of facts and circumstances at the time of action, not in hindsight.

Investment and management functions may be delegated to an investment agent that a prudent trustee of comparable skills could properly delegate under the circumstances. When making such delegation, the Board shall establish the scope and terms of the delegation, consistent with the purposes and terms of the trust, and shall monitor the investment agent performance and compliance with the terms of the delegation. In performing a delegated function, an investment agent owes a duty to the System and the trust to exercise reasonable care to comply with the terms of the delegation. In addition, the Executive Director may delegate certain duties to the System's investment staff without relieving the Executive Director from the ultimate responsibility.

Each party serving in a fiduciary capacity for the trust shall apply the standard of care set forth herein.



## Investment Policies and Procedures (Continued)

### Statement Of Investment Policy (Continued)

#### Asset Allocation

The Board is responsible for the prudent investment of funds and to maintain a proper allocation of the System's investment assets. The Board, in conjunction with its investment consultants, shall set and adjust the System's asset allocation

ranges as necessary to provide an optimal allocation to obtain its target returns. The general investment consultant shall notify the Executive Director and the Board when an asset liability modeling study should be undertaken. It shall be the goal of the System to maintain the following asset allocation targets and ranges:

Asset Category	Minimum*	Target	Maximum*
Total Equity	48.0	53.0	58.0**
Fixed Income	13.0	15.0	17.0
Opportunistic/Alternatives	N/A	5.0	N/A
Real Assets***	N/A	15.0	N/A
Private Equity	N/A	12.0	N/A
Cash Equivalents	0.0	0.0	5.0

\* Due to the illiquid nature of opportunistic/alternatives, real assets, and private equity, it is not prudent to set rebalancing ranges for these asset classes

\*\*Additional allocations to total equity may be made beyond the maximum range to serve as a placeholder for unfunded and uncommitted opportunistic/alternatives, real assets, and private equity

\*\*\*Real assets includes real estate, timber, agriculture, and infrastructure

#### Rebalancing

The asset allocation ranges established by the Board represent the Board's judgment of a portfolio mix that provides the greatest risk/return value. Allowing the portfolio to exceed the Board limits strays from the financial discipline, which the Board believes will – over time – provide the appropriate risk-adjusted return to the System.

The Executive Director is responsible for rebalancing the allowable asset classes and the individual portfolios if any of the asset classes falls outside of the designated range. The general investment consultant shall provide guidance and advice to the Executive Director to best achieve the rebalancing. Rebalancing among individual investment manager portfolios within asset classes may also be necessary to ensure the appropriate level of diversification is achieved by investment style, market capitalization or risk levels (see total asset class guidelines) and/or to take advantage of market conditions, fund manager expertise, opportunities, or other circumstances that could be beneficial to ATRS.

The Executive Director may rebalance across all equity managers, all equity holdings, all fixed income managers, and all fixed income holdings. A Board approved transition manager

may be used for rebalancing. Rebalancing including the use of a Board approved transition manager, as needed, may be initiated by the Executive Director after recommendation from the appropriate investment consultant and positive notice to the Board Chair. The Executive Director and general investment consultant will monitor the asset values by classification for each asset manager on a monthly basis, based on month-end data provided by the custodial bank. The Executive Director and general investment consultant shall regularly inform the Board on the rebalancing pacing and strategy.

Whenever the minimum or maximum range of total equity or fixed income has been exceeded, a transfer of funds or other appropriate action will occur to bring the actual allocation within the prescribed range within a time frame determined to be prudent by the Executive Director in consultation with the general investment consultant.

Normal plan cash flows should be used to the extent possible to rebalance. Interest, dividends, and plan contributions should be used to the extent possible to fund asset classes that are below their target. Withdrawals should be made from asset classes that are above their target.

## Investment Policies and Procedures (Continued)

### Statement Of Investment Policy (Continued)

#### Investment Manager Selection

In order to implement its investment strategy, the System will use individual investment managers. Arkansas Code § 24-3-401 et seq. requires ATRS to always operate under the prudent investor rule. The prudent investor rule requires all investment decisions to be made based on the experience of management, rates of return, appropriate risk, reasonable cost, and all other relevant factors that should be used by prudent investors.

It is the policy of the Board to include, whenever appropriate, qualified minority-owned and women-owned business enterprises in the System's investment manager selection process and to objectively evaluate all qualified investment manager candidates regardless of race, gender or disability.

The Board will evaluate all qualified investment manager candidates with emphasis on demonstrated professional performance, organizational depth, institutional investment management capability, and reasonableness of fee structure regardless of the amount of investment assets under management or the age of the investment management firm.

The Board will use professional consultants that do not use discriminatory practices in the creation and maintenance of their investment manager databases and will require the investment consultants to affirm their use of non-discriminatory practices when recommending investment manager candidates to the Board.

#### Goals

Recognizing the purpose of the System is to remain actuarially sound and pay member benefits, the overall investment goal is to achieve, over a period of years, the greatest rate of return for the System with due consideration given to preserving capital and its purchasing power, and to maintain an appropriate level of risk consistent with the obligations of a prudent investor. The return of the System should exceed, net of fees, a policy benchmark comprised of the respective asset class benchmarks weighted by the asset class policy targets over a full market cycle (approximately five years). During periods of transition to and from non-marketable and illiquid asset classes such as private equity and real assets, actual allocations may be used over extended periods to reflect these changes in the policy targets. Periodic performance reports will provide a detailed description of the policy benchmark composition over time.

The System's actuary sets an expected return based on the Board's policy decisions. Market cycles may result in the System

earning a return materially above or below the actuarial rate of return for extended periods of time. Therefore, the actuarial rate of return will not be used for performance comparison purposes.

#### Total Equity

The total equity exposure of the portfolio shall be well diversified with broad exposures to small, mid, and large capitalization companies and growth and value style sectors across U.S. and non-U.S. markets. The goal for total equity shall be to achieve a total rate of return that will exceed, net of all fees and costs, the return of the aggregate global equity market as measured by the Morgan Stanley Capital International (MSCI) All Country World Index (ACWI) Investable Market Index (IMI) over a full market cycle (approximately five years). Because the total equity portfolio was previously segregated into domestic and global equity components, the total equity portfolio has a bias to domestic equity relative to the MSCI ACWI IMI. Therefore, to ensure appropriate performance measurement, the benchmark for total equity will be appropriately weighted between the Dow Jones U.S. Total Stock Market Index and the MSCI ACWI IMI Index to reflect the current domestic / global asset mix until the domestic allocation is in line with the global opportunity set as defined by the MSCI ACWI IMI. The manager structure of the total equity portfolio should resemble the weighted average of their respective benchmarks and avoid any material biases due to a concentration of managers or management styles. To achieve this goal, the Board may employ various actively managed and passive mandates. The structure of the equity component will be analyzed annually to ensure proper diversification is achieved.

#### Fixed Income

The manager structure of the aggregate fixed income portfolio's risk exposure should resemble the aggregate domestic fixed income market as measured by the Barclays U.S. Universal Bond Index. To help achieve this goal, the Board will employ investment managers that invest assets in a broad array of sectors (government, mortgage backed, credits, asset backed, and commercial mortgage backed bonds), maturities, and credit qualities so that the overall portfolio structure is not materially different from that of the domestic and global fixed income markets. To provide a broad base of low-cost diversification and readily available liquidity, the Board may allocate a portion of the fixed income assets to a passive investment portfolio that approximates the return of the broad fixed income market.

The goal for fixed income investments shall be to achieve a total rate of return that will exceed, net of all costs and fees, the return of the Barclays U.S. Universal Bond Index over a full market cycle (approximately five years).

## Investment Policies and Procedures (Continued)

### Statement Of Investment Policy (Continued)

#### Opportunistic/Alternative Investments

The Opportunistic/Alternatives asset class may include investments in direct hedge funds, hedge fund of funds, commodities, currency mandates, and other alternative strategies that are not closely correlated or related to the traditional asset classes (fixed income, equities, private equity, and real assets). Unique investments that do not fit within the other asset class categories may also be included in the Opportunistic/Alternative category at the Board's discretion.

Because this category may include illiquid investments made through closed end investment partnerships, it may take a period of time to reach and maintain the target allocation of 5%. Assets will be invested in the total equity asset class when the opportunity/alternative allocation is below its long-term target of 5%.

The benchmark for the category will be a weighted average of the benchmarks of the underlying strategies.

The goal of the credit, global macro, and other liquid alternative investments shall be to achieve a total rate of return that will exceed, net of all fees and costs, the return of the appropriate institutional quality hedge fund index over a full market cycle (approximately five years). Appropriate benchmarks will be determined as investments are added to the portfolio.

#### Real Assets

The Real Asset category may include real estate, timber, agriculture, and infrastructure. While no fixed targets are set, the following general parameters have been identified:

- 10% Real Estate
- 2% Timber
- 1% Agriculture
- 2% Infrastructure

The total target of the asset class will be 15%. Because this category may include illiquid investments made through closed end investment partnerships, it will take a period of time to reach these targets. Assets will be invested in the total equity asset class until the total target is attained.

The System may initiate investments in real estate as governed

by the Real Asset Statement of Investment Policy. The System's goal for real estate is to not materially exceed the System's approved target asset allocation for total real estate investments as determined by the Board at the beginning of each fiscal year. Should the real estate target asset allocation be exceeded, the Executive Director, working with the Real Estate Consultant, shall develop a pacing and strategy plan to address the over allocation.

ATRS' Real Estate portfolio is benchmarked on a net of fee basis against the NCREIF Fund Index Open-end Diversified Core Equity Index ("NFI-ODCE"). Once ATRS' Real Estate portfolio reaches its full target allocation for a five year period, it is expected to meet or exceed the NFI-ODCE over rolling five year periods.

The System may initiate direct ownership in timberland or indirect investments in fund of funds, partnerships, corporations, or real estate investment trusts ("REITs") investing in investment grade properties of like kind.

The goal of the timberland investments shall be to achieve a total rate of return that will exceed, net of all fees and costs, the return of the NCREIF Timberland Property Index ("NTPI") over a five year rolling period. The Consumer Price Index plus 300 basis points will be used as a secondary measurement to gauge the timber portfolio's performance compared to the opportunity cost of investing in timber.

The goal of the agriculture investments shall be to achieve a total rate of return that will exceed, net of all fees and costs, the return of the NCREIF Farmland Index ("NFI") over a five year rolling period. The Consumer Price Index plus 300 basis points will be used as a secondary measurement to gauge the agriculture portfolio's performance compared to the opportunity cost of investing in agriculture.

The goal of the infrastructure investments shall be to achieve a total rate of return that will exceed, net of all fees and costs, the return of the Consumer Price Index (CPI) plus 5 percentage points over a full market cycle (approximately ten years). The Consumer Price Index plus 5 percentage points will be used as the benchmark to reflect the opportunity cost of investing in infrastructure. Similar infrastructure programs of institutional investors will also be used as a secondary benchmark to the extent such data is made available.

## Investment Policies and Procedures (Continued)

### Statement Of Investment Policy (Continued)

#### Real Assets (Continued)

The ATRS Total Real Asset Benchmark is weighted by the allocations based on Net Asset Values across the various sub-categories, and thus defined as Real Estate benchmark, Timber benchmark, Agriculture benchmark and Infrastructure benchmark. The net of fee return for ATRS' Total Real Asset Portfolio is expected to meet or exceed the Total Real Asset Benchmark over rolling five year periods.

#### Private Equity

The System may initiate investments in private equity as governed by the Private Equity Statement of Investment Policy. Private equity investments may include domestic and foreign private equity partnerships, venture capital, and mezzanine financing partnerships that are intended to diversify the assets and reduce the likelihood of material losses in any individual investment classification. The investment consultant responsible for private equity shall advise the Executive Director and Board on the Private Equity Statement of Investment Policy and the structure of private equity investments best suited for the System.

The System's goal for private equity investments is to achieve a total rate of return that will exceed, net of all costs and fees, the return of the public equity markets, as measured by the Dow Jones U.S. Total Stock Market Index, plus a liquidity premium of 2 percentage points per year over a full market cycle for private equity (approximately ten years).

#### Cash Equivalents

The System may hold direct ownership in short-term investments or may permit or require managers to hold cash or cash equivalents to meet liquidity needs of the investment manager or of the System.

The System's cash management goal shall be to preserve capital and maintain liquidity.

#### Arkansas-Related Investments

The System may initiate Arkansas-related mortgage loans, promissory notes, direct real estate investments, or purchase insured certificates of deposit or short term securities of Arkansas financial institutions to meet the goals of the

mandated requirements. Arkansas-related investments are categorized according to the appropriate asset class for each investment. In addition, Arkansas related investments include, but are not limited to, investments managed by an Arkansas related manager, Arkansas related investments held by other fund managers, Arkansas timberland, partnerships based in Arkansas, and partnerships holding Arkansas properties.

#### Commingled or Mutual Funds

If a commingled fund or mutual fund is utilized, the portfolio will be governed by the prospectus or similar document for the fund. In those cases, the System will utilize the prudent investor rule and advice of the investment consultant in selecting and evaluating funds initially and in monitoring them on an on-going basis.

#### Derivatives

Derivatives may be used to reduce the risk in a portfolio and provide desired market and security level positions as an alternative to purchasing cash securities. Excessive leverage shall not be created through the use of derivatives in a manner that substantially increases the System's portfolio risk. Each investment manager's derivative usage shall be specified in the investment management agreement or specific guidelines.

The use of futures and options shall be matched by cash or cash equivalent securities, and all short futures positions shall be matched by equivalent long security positions, unless otherwise stated in the investment manager guidelines or authorizing fund documents.

#### Loaning of Securities

The lending agent will evaluate the credit-worthiness of potential borrowers of securities, and will loan securities only to financially sound borrowers. The lending agent will maintain a diversified list of such borrowers in order to mitigate the counterparty risk that is inherent in securities lending.

Collateral levels should be based on the nature of the loaned security and will generally be between 102% and 105% of the market value of the borrowed security. Marking to market will be performed every business day subject to de minimis rules of change in value, and borrowers will be required to deliver additional assets as necessary to maintain over-collateralization of securities loans.

## Investment Policies and Procedures (Continued)

### Statement Of Investment Policy (Continued)

#### Securities Lending Reinvestment Guidelines

The cash collateral portfolio will be managed on an amortized cost basis (maintain a \$1 net asset value) and have investment guidelines that are 2a-7-like in nature (money market fund guidelines) to ensure that only a moderate amount of risk is taken on the reinvestment of the cash collateral. This will control the amount of credit and duration risk that can be taken by the short duration fixed income manager, which will help to mitigate losses due to insufficient collateral relative to the amount on loan. In addition, guidelines for the cash collateral portfolio will be created in conjunction with the lending strategy and with input from the securities lending agent.

The collateral pool should also maintain a reasonable level of overnight liquidity in order to allow for the smooth recall of securities over time.

#### Investment Manager Reporting

The System will require all investment managers, managing partners, and general partners to provide on at least a quarterly and an annual basis, reporting appropriate for the investment.

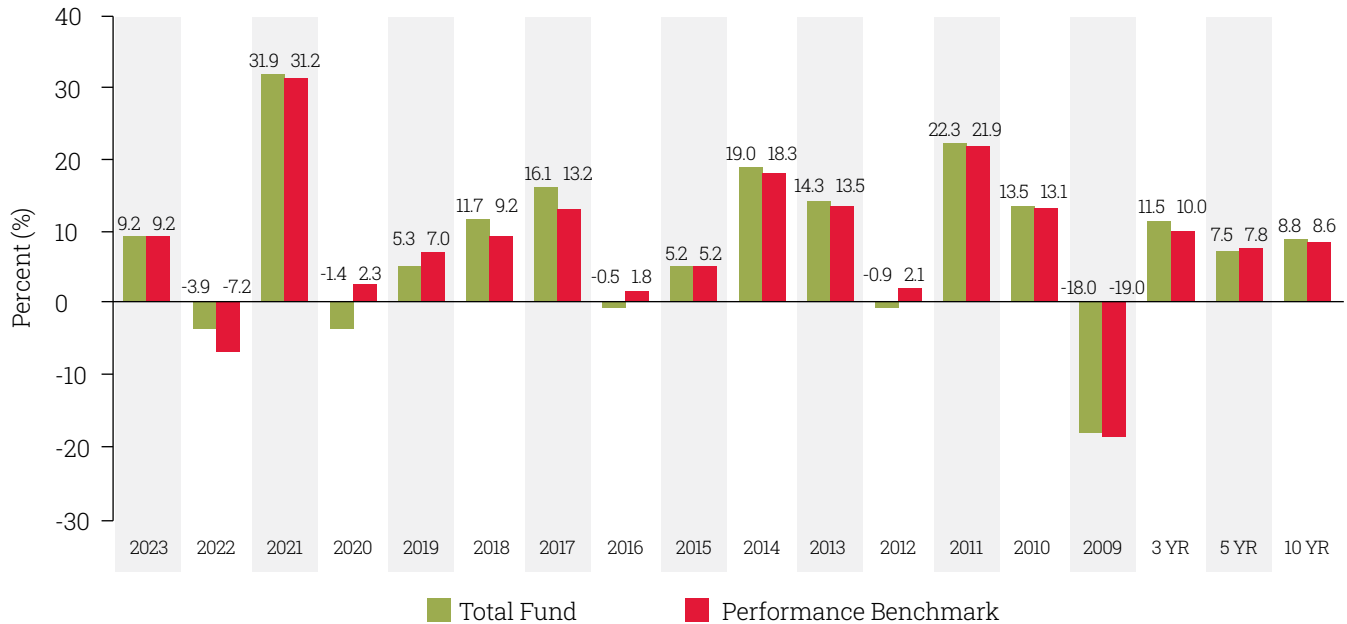
### Roles

The Executive Director and investment consultant are jointly responsible for the initial selection of investment managers and any increase or decrease in an investment manager’s funding. The Executive Director and investment consultant are jointly responsible for monitoring existing investment managers on performance, stability, and compliance. The Executive Director and investment consultant may also recommend termination of an investment manager when circumstances justify termination. Reasons for termination include, but are not limited to, relative performance, relative stability, costs, strategic allocation of assets, or other relevant factors that a prudent investor would use.

### Proxies

The System authorizes the investment manager to vote all proxies related to stocks in which it invests the System’s assets. The System expects the investment manager to cast votes solely in the best interest of plan beneficiaries.

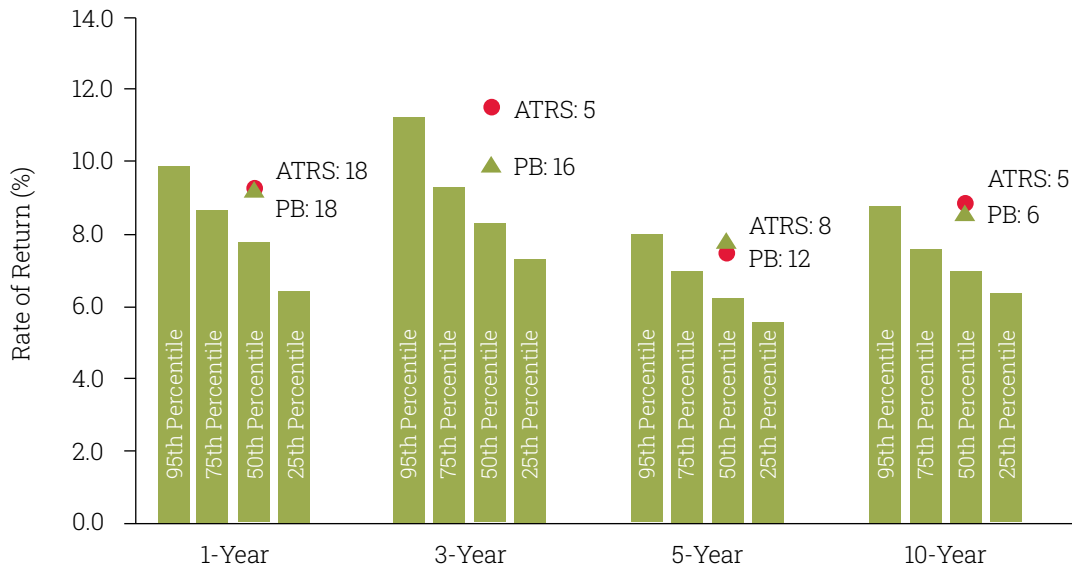
### ATRS Total Fund Fiscal Year Returns vs. Performance Benchmark: Periods Ending June 30th



**ATRS Total Fund Returns Relative to Performance Benchmark: Periods Ending June 30th**



**ATRS Total Fund Ranks: Periods Ending June 30, 2023**  
**Universe of U.S. Public Defined Benefit Plan with over \$1 billion in AUM**



## Traditional Assets | Schedule of Investment Results

Returns for Period Ending June 30, 2023

The table below details the rates of return for the System's investment managers over various time periods ending June 30, 2023. The Appendix at the end of this document provides a description of the benchmarks used for each manager as of the end of the fiscal year.

Public Equity	1-Year	3-Years	5-Years
Pershing Square Holdings	23.5	16.8	21.5
<i>Dow Jones U.S. Total Stock Market Index</i>	<i>18.9</i>	<i>13.7</i>	<i>11.3</i>
Trian Partners	18.5	8.6	7.2
Trian Co-Investments	22.6	13.7	10.2
<i>S&amp;P 500 Index</i>	<i>19.6</i>	<i>14.6</i>	<i>12.3</i>
Jacobs Levy 130/30	18.0	25.7	16.0
<i>Russell 3000 Index</i>	<i>19.0</i>	<i>13.9</i>	<i>11.4</i>
Kennedy Capital Management	6.6	17.4	4.6
<i>Russell 2000 Value Index</i>	<i>6.0</i>	<i>15.4</i>	<i>3.5</i>
Stephens	13.6	5.7	6.7
<i>Russell 2000 Growth Index</i>	<i>18.5</i>	<i>6.1</i>	<i>4.2</i>
Voya Convertibles	9.5	9.0	11.8
<i>Performance Benchmark</i>	<i>10.6</i>	<i>8.6</i>	<i>9.7</i>
Voya Absolute Return	15.6	12.1	8.0
<i>Performance Benchmark</i>	<i>16.5</i>	<i>11.0</i>	<i>8.1</i>
Arrowstreet	--	--	--
SSgA Global Index	16.5	11.3	8.0
BlackRock MSCI ACWI IMI Fund	16.6	11.4	7.9
<i>MSCI AC World IMI (Net)</i>	<i>16.1</i>	<i>11.0</i>	<i>7.6</i>
T. Rowe Price Global Equity	20.0	9.1	11.5
Lazard	10.4	6.6	4.8
<i>MSCI ACWI Index (Net)</i>	<i>16.5</i>	<i>11.0</i>	<i>8.1</i>
Harris Global Equity	18.4	15.4	7.1
<i>MSCI World Index (Net)</i>	<i>18.5</i>	<i>12.2</i>	<i>9.1</i>
Wellington Global Perspectives	13.4	14.6	5.0
<i>Performance Benchmark</i>	<i>13.0</i>	<i>10.8</i>	<i>4.5</i>

## Traditional Assets | Schedule of Investment Results (Continued)

The table that follows details the rates of return for the System's investment managers over various time periods ending June 30, 2023.

<b>Fixed Income</b>	<b>1-Year</b>	<b>3-Years</b>	<b>5-Years</b>
BlackRock	-0.4	-3.6	1.1
<i>Performance Benchmark</i>	<i>0.0</i>	<i>-3.4</i>	<i>1.0</i>
Reams Core Plus Bond Fund	2.6	-2.2	3.2
SSgA Aggregate Bond Index	-1.0	-4.0	0.8
<i>Barclays Aggregate Index</i>	<i>-0.9</i>	<i>-4.0</i>	<i>0.8</i>
Loomis Sayles	3.3	-0.4	2.7
<i>Performance Benchmark</i>	<i>2.7</i>	<i>-1.6</i>	<i>1.9</i>
Wellington Global Total Return	4.8	3.4	3.5
<i>BofA Merrill Lynch 3 Month US T-Bill</i>	<i>3.6</i>	<i>1.3</i>	<i>1.6</i>



## Alternatives | Schedule of Investment Results

The table that follows details the rates of return for the System's investment managers over various time periods ending June 30, 2023.

Opportunistic/Alternatives	1-Year	3-Years	5-Years
Anchorage	6.9	9.9	4.9
York	35.5	9.1	-7.7
<i>Credit Suisse Event Driven</i>	<i>3.0</i>	<i>7.5</i>	<i>3.3</i>
Capula	11.8	6.9	7.4
Graham	3.7	17.8	9.5
<i>HFRI Macro (Total) Index</i>	<i>-0.4</i>	<i>7.3</i>	<i>5.0</i>
Circumference Group Core Value	16.4	10.2	7.6
<i>Russell 2000 Index</i>	<i>12.3</i>	<i>10.8</i>	<i>4.2</i>
Aelous Keystone Fund	11.3	0.6	0.2
Nephila Rubik Holdings	2.2	-7.8	-5.5
Pillar Opportunity	-3.0	--	--
<i>FTSE 3 Month T-Bill</i>	<i>3.7</i>	<i>1.3</i>	<i>1.6</i>
Parametric Global Defensive Equity	12.6	9.2	5.3
<i>Performance Benchmark</i>	<i>10.4</i>	<i>6.4</i>	<i>5.2</i>
Man Alternative Risk Premia	8.5	7.7	3.2
<i>SG Multi Alternative Risk Premia Index</i>	<i>6.1</i>	<i>4.4</i>	<i>0.2</i>
CFM Systematic Global Macro Fund	-4.8	--	--
<i>HFRI Macro: Systematic Diversified Index</i>	<i>-3.4</i>	<i>--</i>	<i>--</i>
Chatham PDSC III	18.8	--	--
Chatham PDSC IV	--	--	--
<i>HFRI Event Driven (Total) Index</i>	<i>5.3</i>	<i>--</i>	<i>--</i>
Silver Point Capital Fund	8.0	--	--
<i>HFRI ED: Distressed/Restructuring Index</i>	<i>1.6</i>	<i>--</i>	<i>--</i>
Prophet Mtg. Service Opportunities	--	--	--
<i>Credit Suisse Hedge Fund Index</i>	<i>--</i>	<i>--</i>	<i>--</i>

## Real Assets | Schedule of Investment Results

The table that follows details the rates of return for the System's investment active managers for the period ending June 30, 2023.

Real Estate Manager	Since-Inception IRR	Inception Date	Real Estate Manager (Continued)	Since-Inception IRR	Inception Date
<b>Core &amp; Open End Funds</b>			<b>Closed End Funds (Continued)</b>		
Arkansas Investments	8.0%	12/31/2007	Kayne Anderson Real Estate Partners V	12.8%	6/15/2018
JP Morgan Strategic Property Fund	6.7%	2/5/2007	Kayne Anderson Real Estate Partners VI	7.2%	6/4/2021
MetLife Commercial Mortgage Income Fund, LP	3.3%	7/1/2019	Landmark Real Estate Fund VI	18.5%	6/30/2010
Prime Property Fund	-6.0%	3/31/2022	Landmark Real Estate Fund VIII	16.3%	8/2/2017
Prudential PRISA	6.5%	6/30/2005	Landmark Real Estate Fund IX	N/M	12/31/2021
RREEF Core Plus Industrial Fund	-5.4%	9/30/2021	LaSalle Asia Opportunity Fund IV	31.9%	7/22/2014
UBS Trumbull Property Fund	5.1%	3/31/2006	LaSalle Asia Opportunity V	6.9%	9/30/2017
UBS Trumbull Property Income Fund	5.0%	7/3/2017	LaSalle Asia Opportunity VI	N/M	3/31/2022
<b>Closed End Funds</b>			LaSalle Income & Growth Fund VI	8.4%	7/16/2013
Almanac Realty Securities V, LP	11.9%	5/12/2008	LaSalle Income & Growth Fund VII	2.4%	6/30/2017
Almanac Realty Securities VI	8.8%	11/20/2012	LaSalle Income & Growth Fund VIII	13.9%	2/26/2020
Almanac Realty Securities VII	10.9%	4/24/2015	LBA Logistics Value Fund IX	-10.5%	2/22/2022
Almanac Realty Securities VIII	11.0%	12/21/2018	Lone Star Real Estate Fund IV	10.4%	10/1/2015
Almanac Realty Securities IX	-13.0%	6/13/2022	Lone Star Real Estate Fund VII	N/M	4/30/2023
Blackstone Real Estate Partners Europe VI (EURO Vehicle)	16.1%	11/20/2019	Long Wharf Real Estate Partners V	7.9%	11/20/2015
Blackstone Real Estate Partners VII	14.9%	2/6/2012	Long Wharf Real Estate Partners VI, L.P.	20.9%	3/30/2020
Blackstone Real Estate Partners X	-26.8%	6/30/2022	Mesa West Real Estate Income Fund V	4.9%	11/8/2021
Calmwater Real Estate Credit Fund III	7.0%	12/27/2017	Metropolitan Real Estate Partners Co-Investments Fund, L.P.	9.2%	12/30/2015
Carlyle Realty Partners IX	N/M	6/30/2021	O'Connor North American Property Partners II, L.P.	-3.0%	4/10/2008
Carlyle Realty Partners VII	14.0%	7/15/2014	PGIM Real Estate Capital VII (USD Feeder)	10.8%	1/28/2021
Carlyle Realty Partners VIII	28.8%	6/29/2018	Rockwood Capital Real Estate Partners Fund IX	9.9%	12/27/2012
CBRE Strategic Partners U.S. Opportunity 5	5.4%	8/13/2008	Rockwood Capital Real Estate Partners Fund XI	3.2%	12/18/2019
CBRE Strategic Partners U.S. Value 8	3.7%	9/30/2016	Torchlight Debt Opportunity Fund IV	9.3%	7/19/2013
CBRE Strategic Partners U.S. Value 9	-4.2%	7/20/2020	Torchlight Debt Opportunity Fund V	10.1%	6/29/2015
Cerberus Institutional Real Estate Partners III	13.4%	10/3/2013	Torchlight Debt Opportunity Fund VI	8.1%	2/12/2018
FPA Core Plus Fund IV	8.6%	9/10/2018	Torchlight Debt Opportunity Fund VII	5.0%	7/16/2020
GLP Capital Partners IV	1.6%	9/28/2021	Walton Street Real Estate Debt Fund II, L.P.	5.7%	6/28/2019
Harbert European Real Estate Fund IV	-0.8%	6/30/2016	Westbrook Real Estate Fund IX	6.7%	6/11/2013
Heitman European Property Partners IV	-3.8%	12/15/2008	Westbrook Real Estate Fund X	8.6%	7/18/2016
			<b>Total Real Estate</b>	<b>7.5%</b>	<b>5/28/1997</b>

## Real Assets | Schedule of Investment Results (Continued)

The table that follows details the rates of return for the System's investment active managers for the period ending June 30, 2023.

<b>Timber &amp; Agriculture</b>	<b>Since-Inception IRR</b>	<b>Inception Date</b>
BTG Timber Separate Account	5.1%	2/18/1998
BTG Pactual Open Ended Core U.S. Timberland Fund	9.6%	12/30/2019
HFMS Farmland Separate Account	6.6%	4/22/2011
UBS Agrivest Core Farmland Fund	5.2%	4/1/2015

<b>Infrastructure</b>	<b>Since-Inception IRR</b>	<b>Inception Date</b>
Antin Infrastructure Partners II, L.P.	13.2%	7/3/2014
AxInfra NA II LP	9.1%	3/1/2021
DIF Infrastructure Fund V, L.P.	8.1%	6/5/2018
DIF Infrastructure Fund V, L.P.	N/M	12/31/22
Global Energy & Power Infrastructure Fund II	12.7%	12/23/2014
Global Infrastructure Partners III, L.P.	10.0%	5/18/2016
IFM Global Infrastructure Fund (US), L.P.	10.7%	10/1/2018
ISQ Global Infrastructure Fund III	6.1%	12/30/2021
KKR Global Infrastructure Investors II, L.P.	17.0%	12/18/2014
KKR Diversified Core Infrastructure Fund	7.1%	4/1/2022
Macquarie Infrastructure Partners III, L.P.	18.5%	2/13/2015
Macquarie Infrastructure Partners V, L.P.	14.7%	12/16/2020

## Private Equity | Schedule of Investment Results

The table that follows details the rates of return for the System's investment active managers for the period ending June 30, 2023.

	Annualized Internal Rate of Return*	Inception Date		Annualized Internal Rate of Return*	Inception Date
<b>Individual Partnerships</b>			<b>Private Equity (Continued)</b>		
Audax Mezzanine III	9.79%	5/10/2010	CSFB-ATRS 2005-1 Series	7.47%	5/1/2005
Big River - Mezzanine	17.34%	6/27/2014	CSFB-ATRS 2006-1 Series	10.13%	8/1/2006
Blackstone Mezzanine I	10.16%	12/22/1999	Cypress MBP II	-0.48%	6/18/1999
DLJ Investment II	10.35%	11/10/1999	DH Tech I	0.00%	1/12/2000
Greyrock IV	12.11%	12/30/2016	Diamond State	5.46%	4/15/2000
Greyrock V	12.05%	4/15/2020	Diamond State II	11.88%	1/4/2007
Greyrock VI	NMF	3/8/2023	DLJ MBP III	19.36%	7/19/2000
Insight Mezzanine I	6.54%	7/13/2009	Doughty Hanson III	13.54%	10/20/1997
			DW Healthcare III	18.96%	12/21/2011
			DW Healthcare IV	20.38%	12/21/2015
			DW Healthcare V	8.71%	7/22/2019
<b>Private Equity</b>			EnCap IX	10.39%	12/19/2012
21st Century Group I	-3.75%	4/6/2000	EnCap VIII	0.53%	1/31/2011
Advent GPE VI-A	16.42%	3/12/2008	EnCap X	15.48%	4/7/2015
Alpine Investors IX	NMF	12/20/2022	EnCap XI	18.79%	3/6/2017
Alpine Investors VIII	43.88%	8/13/2021	FP CF Access	24.68%	7/31/2019
Altaris Constellation	24.77%	7/20/2016	FP CF Access II	NMF	2/4/2022
Altaris IV	28.79%	6/30/2017	FP Co-Invest VI	NMF	2/24/2023
Altus Capital II	13.39%	6/3/2011	FP Intl 2011	9.65%	2/16/2011
American Industrial VI	26.28%	9/30/2015	FP Intl 2012	8.00%	1/31/2012
American Industrial VII	25.00%	3/29/2019	FP Intl 2013	8.21%	2/7/2013
Arlington IV	24.26%	7/29/2016	FP Intl 2014	14.30%	1/23/2014
Arlington V	34.44%	5/3/2019	FP Intl 2015	11.51%	1/23/2015
Arlington VI	NMF	4/29/2022	FP Intl 2016	8.37%	1/21/2016
Atlas Capital II	19.86%	12/13/2013	FP Intl 2017	18.59%	3/1/2017
ATRS-FP PE	19.95%	4/1/2012	FP Intl 2018	12.32%	2/15/2018
Big River - Equity	14.98%	6/27/2014	FP Intl 2019	32.75%	3/27/2019
Big River - Funding	4.27%	1/31/2017	FP Intl X	7.76%	3/27/2020
Big River - Holdings Note	11.05%	8/23/2017	FP Intl XI	NMF	1/14/2022
Big River - Holdings Note 2023	5.57%	3/13/2018	FP Venture Opp	NMF	1/7/2022
Big River - Holdings Note 2023-2	6.50%	9/14/2018	FP Venture XIII	9.53%	2/7/2020
Big River - Preferred Equity	12.51%	8/23/2017	FP Venture XIV	NMF	1/7/2022
Big River - Sr Secured Debt	14.71%	6/27/2014	FP Venture 2008	18.12%	1/18/2008
Bison V	14.55%	6/30/2016	FP Venture 2009	16.98%	1/16/2009
Bison VI	NMF	12/23/2021	FP Venture 2010	16.66%	1/29/2010
Blue Oak Arkansas	-34.84%	3/26/2014	FP Venture 2011	34.84%	2/16/2011
Boston Ventures VII	2.82%	12/14/2007	FP Venture 2012	20.70%	1/31/2012
BV IX	31.98%	4/7/2017	FP Venture 2013	24.42%	2/7/2013
BV VIII	46.12%	8/15/2014	FP Venture 2014	20.64%	1/23/2014
BV X	49.94%	2/28/2020	FP Venture 2015	13.35%	1/23/2015
BV XI	NMF	7/1/2022	FP Venture 2016	21.71%	1/21/2016
Castlelake II	5.88%	5/4/2012	FP Venture 2017	21.37%	3/1/2017
Castlelake III	6.58%	2/28/2014	FP Venture 2018	22.35%	3/23/2018
Clearlake V	41.46%	1/12/2018	FP Venture 2019	20.70%	6/25/2019
Clearlake VI	26.24%	12/10/2019	Greenbriar V	18.49%	2/22/2021
Clearlake VII	NMF	10/29/2021			
Court Square III	20.43%	7/17/2012			

## Private Equity | Schedule of Investment Results (Continued)

The table that follows details the rates of return for the System's investment active managers for the period ending June 30, 2023.

	Annualized Internal Rate of Return*	Inception Date		Annualized Internal Rate of Return*	Inception Date
<b>Private Equity (Continued)</b>			<b>Private Equity (Continued)</b>		
Greenbriar VI	NMF	10/17/2022	Riverside IV	21.27%	12/4/2009
GTLA Holdings	29.56%	8/30/2018	Riverside V	12.65%	5/11/2012
Highland Contingent Note	6.26%	7/20/2018	Riverside VI	12.76%	7/3/2018
Highland Equity	0.00%	7/28/2016	Riverside Value Fund I	152.73%	3/14/2022
HMTF III	1.85%	3/4/1997	Second Cinven	9.30%	4/30/1998
HMTF IV	-6.09%	6/18/1998	Siris III	11.02%	12/11/2014
HMTF V	17.57%	11/28/2000	Siris IV	15.52%	12/22/2017
Insight Equity II	8.42%	7/13/2009	SK Capital V	11.94%	7/5/2018
JF Lehman III	11.17%	8/8/2011	SK Capital VI	NMF	3/3/2022
JF Lehman IV	35.52%	10/23/2015	Sycamore Partners II	4.74%	4/7/2014
JF Lehman V	19.32%	6/28/2019	Sycamore Partners III	19.39%	12/21/2017
JF Lehman VI	NMF	10/27/2022	TA XI	26.78%	4/30/2009
KPS III Supplemental	22.83%	8/14/2009	Tennenbaum VI	7.27%	2/15/2011
KPS IV	24.23%	4/12/2013	Thoma Bravo Discover	36.12%	1/29/2016
KPS Mid Cap II	NMF	6/30/2023	Thoma Bravo Discover II	24.26%	12/20/2017
KPS Mid-Market I	22.89%	10/15/2019	Thoma Bravo Discover III	6.40%	5/29/2020
KPS V	26.28%	10/15/2019	Thoma Bravo Discover IV	NMF	4/13/2022
Levine Leichtman V	17.41%	4/30/2013	Thoma Bravo Explore I	24.45%	1/23/2020
Lime Rock Resources III	3.27%	7/16/2013	Thoma Bravo Explore II	NMF	5/2/2022
LLR III	16.52%	5/9/2008	Thoma Bravo XI	27.03%	5/1/2014
LLR VI	2.70%	9/25/2020	Thoma Bravo XII	16.33%	4/27/2016
Mason Wells III	20.55%	5/13/2010	Thoma Bravo XIII	29.42%	9/24/2018
NGP IX	10.84%	2/27/2008	Thoma Bravo XIV	4.67%	5/29/2020
NGP X	-0.28%	4/20/2012	Thoma Bravo XV	NMF	4/13/2022
NGP XI	10.66%	9/30/2014	Vista Equity III	28.51%	7/11/2008
NGP XII	15.45%	10/2/2017	Vista Foundation II	15.13%	10/31/2013
Oak Hill I	10.59%	4/1/1999	Vista Foundation III	22.77%	5/19/2016
One Rock II	14.00%	3/31/2017	Wellspring V	16.22%	7/28/2010
PineBridge Structured III	-4.27%	12/31/2015	Wicks IV	21.21%	4/29/2011
Revelstoke III	10.87%	10/1/2021	WNG II	0.85%	6/26/2018

\*2022 and 2023 vintage year funds' performance is deemed not meaningful (NMF).

## Description of Benchmarks

**Total Fund** - The Performance Benchmark for the Total Fund reflects a weighted average of the underlying asset class benchmarks, weighted as follows: Opportunistic/Alternatives and Real Assets at the weight of the previous month's ending market values, Fixed Income and Private Equity at their long-term Policy Targets of 15% and 12%, respectively, and Total Equity at its long-term Policy Target of 53% plus the balance of the unfunded or uncommitted assets of the Opportunistic/Alternatives and Real Assets categories. From October 2007 to

July 2013, the Performance Benchmark was the performance of the asset class benchmarks as a weighted average of the previous month's ending market values. The historical components of the benchmark are shown in the table below. Returns prior to September 30, 1996, consist of the actual allocations to the seven different asset classes included in the ATRS portfolio over time. The historical benchmarks used for each asset class are noted below.

Date	DJ U.S. Total Stock Market Index	Russell 3000 Index	MSCI ACW ex-US Index	MSCI ACWI	Bloomberg Barclays U.S. Universal Bond Index	Bloomberg Barclays Aggregate Bond Index	Alternative Policy <sup>1</sup>
03/31/2004 – 09/30/2007	40.0%	--	17.5%	--	25.0%	--	17.5%
07/31/2003 – 02/29/2004	40.0%	--	17.5%	--	--	25.0%	17.5%
10/31/2001 – 06/30/2003	--	40.0%	17.5%	--	--	25.0%	17.5%
08/31/1998 – 09/30/2001	--	40.0%	17.0%	--	--	28.0%	15.0%
10/31/1996 – 07/31/1998	--	40.0%	20.0%	--	--	28.0%	12.0%

<sup>1</sup>Currently, the benchmarks for Real Assets and Opportunistic/Alternatives are included in the Total Fund Performance Benchmark at their actual beginning quarter weights. Prior October 1, 2007, private equity, real estate, and other alternatives (timber) were grouped together in one "Alternatives Asset Class." The Alternative Policy for this asset class was comprised of the weighted average of the Real Estate, Private Equity, and Other Alternatives policy benchmarks. Prior to July 31, 2003 the alternative benchmark consisted of 57.0% of the Russell 3000 + a 2% Premium per year, 8.5% of the NCREIF South Timberland Index, 28.5% of the Real Estate Index, 6% of the EnnisKnupp STIF Index. After this date, real estate and private equity benchmarks started to report on a one-quarter lag to align with the returns of their asset classes.

**Total Equity** - A weighted average of the Dow Jones U.S. Total Stock Market Index and the MSCI All Country World IMI Index based on weights of the underlying investment manager allocations. As of June 1, 2023, the Total Equity Performance Benchmark was comprised of 33.0% DJ U.S. Total Stock Market Index and 67.0% MSCI ACWI IMI

**Total Fixed Income** - The Bloomberg Barclays U.S. Universal Bond Index as of March 1, 2004.

**Total Opportunistic/Alternatives** – A custom benchmark consisting of 25% DJ/CS Event-Driven Index, 25% HFR Macro Index, and 50% South Timberland NCREIF Index until June 30, 2013; 60% HFR Macro Index and 40% DJ/CS Event-Driven Index until July 31, 2015; 56% HFR Macro Index, 38% DJ/CS Event-Driven Index, and 6% Russell 2000 Index until March 31, 2016; 45% HFR Macro Index, 30% DJ/CS Event-Driven Index, 5% Russell 2000 Index, and 20% Citigroup 3 Month T-bill until May 31, 2016; 37% HFR Macro Index, 25% DJ/CS Event-Driven Index, 5% Russell 2000 Index, and 33% Citigroup 3 Month T-bill until May 31, 2017; 28% HFR Macro Index, 20% DJ/CS Event-Driven Index, 4% Russell

2000 Index, 25% Citigroup 3 Month T-bill, and 23% Parametric Performance Benchmark until May 31, 2018. 22% HFR Macro Index, 18% DJ/CS Event-Driven Index, 3% Russell 2000 Index, 27% FTSE 3 Month T-bill, 18.50% Parametric Performance Benchmark, and 11.5% SG Multi-Alternative Risk Premia Until June 30, 2018. 20% HFR Macro Index, 15% DJ/CS Event-Driven Index, 3.5% Russell 2000 Index, 25% FTSE 3 Month T-bill, 16.5% Parametric Performance Benchmark, and 20% SG Multi-Alternative Risk Premia Until August 31, 2018. 17% HFR Macro Index, 15% DJ/CS Event -Driven Index, 3.5% Russell 2000 Index, 28% FTSE 3 Month T-bill, 16.5% Parametric Performance Benchmark, and 20% SG Multi-Alternative Risk Premia Until November 30, 2018. 15% HFR Macro Index, 15% DJ/CS Event-Driven Index, 3.5% Russell 2000 Index, 30% FTSE 3 Month T-bill, 16.5% Parametric Performance Benchmark, and 20% SG Multi-Alternative Risk Premia thereafter.

**Total Real Assets** - A custom benchmark consisting of a weighted average of the net asset values at previous month's end of the subcategories' benchmarks, defined as Real Estate Benchmark, Timber Benchmark, Agriculture Benchmark and Infrastructure Benchmark.

## Description of Benchmarks (Continued)

**Real Estate** - NFI-ODCE - NCREIF Fund Index Open-end Diversified Core Equity Index.

**Timber Benchmark** - NCREIF Timberland Property Index (NTPI) weighted according to ATRS' regional exposure based on net asset value.

**Agriculture Benchmark** - NCREIF Farmland Index (NFI) weighted according to ATRS' regional and crop type exposure based on net asset value.

**Infrastructure Benchmark** - Consumer Price Index (CPI) plus 500 basis points annually.

**Total Private Equity** - The Dow Jones U.S. Total Stock Market Index + a 2% premium per year.

**Cash Equivalents** - The Citigroup 90 day T-bill.

**Voya Convertibles Performance Benchmark** - On January 1, 2005, the benchmark for the portfolio was changed to the Merrill Lynch Convertible Bond (All Quality) Index. Prior to January 1, 2005, the performance benchmark for the Voya (previously Nicholas Applegate) portfolio was the CSFB Convertible Securities Index. Prior to May 1, 2004, the performance benchmark consisted of 90% CSFB Convertible Securities Index and 10% Salomon High Yield Index.

**BlackRock Performance Benchmark** - The Bloomberg Barclays U.S. Universal Bond Index as of March 1, 2004. Previously it was the Bloomberg Barclays Aggregate Bond Index.

**Jacobs Levy Performance Benchmark** - On January 1, 2008, the benchmark for the portfolio was changed to the Russell 3000 Index. Prior to January 1, 2008, the portfolio benchmark was the Russell 1000 Growth Index.

**Loomis Sayles Performance Benchmark** - An Index that splices 65% of the Bloomberg Barclays Capital Government/Credit Index and 35% Bloomberg Barclays Capital High Yield Index.

**PIMCO Performance Benchmark** - The Bloomberg Barclays U.S. Universal Bond Index as of March 1, 2004. Previously it was the Bloomberg Barclays Capital Aggregate Bond Index.

**Wellington Global Performance Benchmark** - As of July 1, 2012 the benchmark was changed to MSCI All Country World Small Cap Index. Prior to July 1, 2012, the benchmark was MSCI All Country World Small/Mid Cap Index.

**Bloomberg Aggregate Bond Index** - A market-value weighted index consisting of the Bloomberg Barclays Corporate, Government and Mortgage-Backed Securities Indices. The Index also includes credit card-, auto- and home equity loan-backed securities, and is the broadest available measure of the aggregate U.S. fixed income market.

**Bloomberg Government/Credit Index** - The Bloomberg Barclays Government/Credit Index measures the investment return of all medium and larger public issues of U.S. Treasury, agency, investment-grade corporate, and investment-grade international dollar-denominated bonds.

**Bloomberg High Yield Index** - The Bloomberg Barclays High Yield Index covers the universe of fixed rate, non-investment grade debt. Pay-in-kind (PIK) bonds, Eurobonds, and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.

**Bloomberg U.S. Universal Bond Index** - A market-value weighted index consisting of the components of the Bloomberg Barclays Aggregate Bond Index, plus EuroDollar bonds, emerging markets bonds, 144A fixed income securities, and U.S. corporate high yield securities.

**Citigroup 90 day T-bill Index** - Treasury bill rates of return, as reported by Citigroup (Salomon Smith Barney), for bills with a maximum time remaining to maturity of 90 days.

**DJ/CS Event-Driven Index** - Event driven funds typically invest in various asset classes and seek to profit from potential mispricing of securities related to a specific corporate or market event. Such events can include: mergers, bankruptcies, financial or operational stress, restructurings, asset sales, recapitalizations, spin-offs, litigation, regulatory and legislative changes as well as other types of corporate events. Event driven funds can invest in equities, fixed income instruments (investment grade, high yield, bank debt, convertible debt and distressed), options and various other derivatives. Many event driven fund managers use a combination of strategies and adjust exposures based on the opportunity sets in each subsector.

**Dow Jones U.S. Total Stock Market Index** - A capitalization-weighted stock index representing all U.S. common stocks traded regularly on the organized exchanges. The Index is the broadest measure of the aggregate U.S. stock market.

## Description of Benchmarks (Continued)

**FTSE Europe** - A tradable index, designed to represent the performance of the 100 most highly capitalized blue chip companies in Europe.

**HFR Macro Index** – An index representing investment managers which trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets.

**HFR Distressed/Restructuring Index** – An index representing distressed restructuring strategies which employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings.

**LIBOR Index** - London Interbank Offered Rate. A filtered average of the world's most creditworthy banks' interbank deposit rates with maturities between overnight and one full year.

**Merrill Lynch Convertible Bond (All Quality) Index** – The Merrill Lynch All Convertibles All Qualities Index is a widely used index that measures convertible securities' performance. It measures the performance of U.S. dollar-denominated convertible securities not currently in bankruptcy with a total market value greater than \$50 million at issuance.

**MSCI All Country World Index** - A capitalization-weighted index of stocks representing 46 developed and emerging country markets.

**MSCI Europe, Australasia, Far East (EAFE) Non-U.S. Stock Index** - A capitalization-weighted index of stocks representing 23 developed and emerging country markets in Europe, Australia, Asia and the Far East.

**MSCI World Index** - A capitalization-weighted index of stocks representing 23 developed stock markets in Europe, Asia and Canada.

**NFI-ODCE Index** - NCREIF Fund Index Open-end Diversified Core Equity Index is an index of investment returns reporting on both a historical and current basis the results of 33 open-end commingled funds pursuing a core investment strategy; underlying funds are leveraged with gross and net returns available

**Russell 3000 Index** – An index that measures the performance of the 3000 stocks that make up the Russell 1000 and Russell 2000 Indices.

**Russell 1000 Index** – An index that measures the performance of the largest 1,000 stocks contained in the Russell 3000 Index.

**Russell 1000 Value Index** – An index that measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower I/B/E/S growth forecasts.

**Russell 2000 Index** – An index that measures the performance of the smallest 2000 companies contained in the Russell 3000 Index.

**Russell 2000 Growth Index** – An index that measures the performance of those Russell 2000 companies with greater price-to-book ratios and greater I/B/E/S growth forecasts.

**Russell 2000 Value Index** – An index that measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower I/B/E/S growth forecasts.

**S&P 500 Stock Index** - A capitalization-weighted stock index consisting of the 500 largest publicly traded U.S. stocks.

**SG Multi Alternative Risk Premia Index** – An equally-weighted peer index representing risk premia managers who employ investment programs diversified across multiple asset classes while utilizing multiple risk premia factors.

**South Timberland Index** – The largest regional subindex of the NCREIF Timberland Index, consisting of timberland properties held in the U.S. South. This includes close to 300 properties with more than 10 million cumulative acres of timberland in the following states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. Calculations are based on quarterly returns at the individual property level. Performance is reported on an all-cash, unlevered basis, gross of investment management fees.



## Description of Universes

**Total Fund** - The Total Fund and its benchmark are ranked in our Public Fund Universe. The universe is calculated based on data provided by BNY Mellon Performance & Risk Analytics, LLC, and includes roughly 90 public pension plans each with assets greater than \$1 billion.

**Total Equity** - The total equity component and its benchmark are ranked in our global equity component universe. The universe is calculated based on data provided by BNY Mellon Performance & Risk Analytics, LLC, and includes over 450 global equity portfolios

**Total Fixed Income** - The total fixed income component and its benchmark are ranked in our fixed income component universe. The universe is calculated based on data provided by BNY Mellon Performance & Risk Analytics, LLC, and includes the fixed income asset class returns of approximately 50 public pension plans each with assets greater than \$1 billion.



# Actuarial





January 28, 2024

Board of Trustees  
 Arkansas Teacher Retirement System  
 1400 West Third Street  
 Little Rock, Arkansas 72201

Dear Board Members:

The basic funding objective of the Arkansas Teacher Retirement System (ATRS) is to establish and receive contributions which:

- When expressed in terms of the percentage of active member payroll, will remain approximately level from generation to generation; and
- When combined with present assets and future investment return, will be sufficient to meet the financial obligations of ATRS to present and future retirees and beneficiaries.

The progress being made toward the realization of the financing objectives of the System through June 30, 2023 is illustrated in the attached Exhibits 1 and 2. Actuarial funding valuations are performed each year and the most recent funding valuations were completed based upon census data, asset data, and plan provisions as of June 30, 2023. In addition to the funding valuation reports, the actuary produces separate financial reporting information in accordance with Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68.

The System's administrative staff provides the actuary with data for the actuarial valuations. The actuary relies on the census data after reviewing it for internal and year-to-year consistency. The actuary does not audit census data. The actuary summarizes and tabulates population data in order to analyze longer term trends. Asset information was also accepted without audit. The actuary is not responsible for the accuracy or completeness of any information provided by ATRS.

The figures disclosed in the Supplementary Schedules to the Financial Section were provided by Gabriel, Roeder, Smith & Company, as were the Notes to Trend Data. In addition, Gabriel, Roeder, Smith & Company was responsible for the following schedules found in the Actuarial Section:

- Computed Actuarial Liabilities
- Determination of Amortization Period as of June 30, 2023
- Active Members in Valuation Data

- Retirees and Beneficiaries Added to and Removed from Rolls
- Short Condition Test
- Actuarial Gain (Loss) by Risk Area during the Period June 30, 2022 to June 30, 2023
- Summary of Actuarial Assumptions and Methods
- Single Life Retirement Values
- Probabilities of Retirement for Members
- Assumed Duration in T-DROP for Members
- Teachers Separations and Individual Pay Increases
- Support Employees Separations and Individual Pay Increases
- Comments
- Schedule of Retired Members by Benefit Type
- Schedule of Average Benefit Payments

Assets are valued on a market related basis that recognizes each year's difference between actual and assumed investment return over a closed four-year period.

Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. The Board adopts these assumptions after considering the advice of the actuary and other professionals. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. The combined effect of the assumptions is expected to have no significant bias (i.e. not significantly optimistic or pessimistic). The assumptions and methods used for funding purposes meet the parameters set by the Actuarial Standards of Practice. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area. The June 30, 2023 valuations were based upon assumptions that were adopted by the ATRS Board in connection with a study of experience covering the 2015-2020 period.



The Arkansas Teacher Retirement System remains stable with an 82.1% funded position (based on the actuarial value of assets) and an 80.8% funded position based upon the market value of assets as of June 30, 2023. The amortization period as of June 30, 2023 is 26 years.

**Based upon the results of the June 30, 2023 valuations, we are pleased to report to the Board of Trustees that the Arkansas Teacher Retirement System is meeting its basic financial objective of level percent-of-payroll financing.**

Readers desiring a more complete understanding of the actuarial condition of ATRS are encouraged to obtain and read the complete actuarial valuation reports. The complete reports also contain certain very important disclosures mandated by Actuarial Standards of Practice. The material in the Actuarial Section and Financial Sections of this Annual Report contains some, but not all, of the information in the actuarial reports.

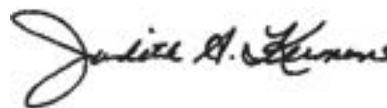
Future actuarial measurements may differ significantly from the current measurements presented in this information due to such factors as the following: plan experience differing from

that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law. This information does not contain an analysis of the potential range of such future measurements.

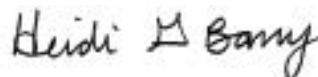
This information was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the information and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This information has been prepared by actuaries who have substantial experience valuing public employee retirement systems. Judith A. Kermans, Heidi G. Barry and Derek Henning are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,  
Gabriel, Roeder, Smith & Company



Judith A. Kermans, EA, FCA, MAAA



Heidi G. Barry, ASA, FCA, MAAA

Derek Henning, ASA, EA, FCA, MAAA

## Exhibit 1 | Computed Actuarial Liabilities

as of June 30, 2023

Actuarial Present Value of	(1) Total Present Value	Entry Age Actuarial Cost Method	
		(2) Portion Covered by Future Normal Cost Contributions	(3) Accuarial Accrued Liabilities (1)-(2)
Age and service retirement allowances based on total service likely to be rendered by present active members.	\$ 10,997,036,288	\$ 2,892,841,180	\$ 8,104,195,108
Age and service retirement allowances based on total service likely to be rendered by present T-DROP members.	1,901,631,818	39,016,167	1,862,615,651
Vested deferred benefits likely to be paid present active and inactive members.	1,531,547,444	487,889,511	1,043,657,933
Survivor benefits expected to be paid on behalf of present active members.	187,006,99	71,372,302	115,634,694
Disability benefits expected to be paid on behalf of present active members.	222,460,200	111,729,654	110,730,546
Refunds of member contributions expected to be paid on behalf of present active members.	27,682,895	183,329,469	(155,646,574)
Benefits payable to present retirees and beneficiaries.	14,510,824,580	-	14,510,824,580
<b>Total</b>	<b>\$ 9,378,190,221</b>	<b>\$ 3,786,178,283</b>	<b>\$ 25,592,011,938</b>
Funding Value of Assets	21,014,908,823	-	21,014,908,823
<b>Liabilities to be covered by future contributions</b>	<b>\$ 8,363,281,398</b>	<b>\$ 3,786,178,283</b>	<b>\$ 4,577,103,115</b>

## Exhibit 2 | Determination of Amortization Period

Computed as of June 30, 2023 and June 30, 2022

Computed Contributions for	Percents of Active Member Payroll			June 30, 2022 Combined
	June 30, 2023 Teachers	June 30, 2023 Support	June 30, 2023 Combined	
Normal Cost				
Age & Service Annuities	11.24%	7.54%	<b>10.24%</b>	10.20%
Deferred Annuities	1.49%	2.31%	<b>1.71%</b>	1.73%
Survivor Benefits	0.27%	0.19%	<b>0.25%</b>	0.25%
Disability Benefits	0.41%	0.39%	<b>0.40%</b>	0.40%
Refunds of Member Contributions	0.48%	1.22%	<b>0.68%</b>	0.68%
Total	13.89%	11.65%	<b>13.28%</b>	13.26%
Average Member Contributions	6.62%	5.16%	<b>6.23%</b>	6.21%
Net Employer Normal Cost	7.27%	6.49%	<b>7.05%</b>	7.05%
Unfunded Actuarial Accrued Liabilities			<b>7.95%</b>	7.95%
Employer Contribution Rate			<b>15.00%</b>	15.00%
Amortization Years			<b>26</b>	26

The amortization period is the number of years it will take to pay off the unfunded liability of \$4.6 billion, assuming contributions remain at the Fiscal 2024 level. Since 2000, the period has varied from a low of 19 years to a high of over 100 years. If experience in FY 2024 is reasonably in line with expectations, the amortization period is likely to decrease in the next valuation due to the phase-in of net investment gains.

## Schedule of Active Member Valuation Data

Valuation Date June 30	Active Members in Valuation		Average Annual Pay	
	Number	Annual Payroll (Millions)	Amount	% Change
<b>2023</b>	<b>71,387</b>	<b>\$3,353</b>	<b>\$46,963</b>	<b>4.8%</b>
2022	71,378	3,199	44,811	1.8%
2021	70,098	3,086	44,030	5.1%
2020	70,539	2,954	41,884	4.0%
2019	72,164	2,907	40,285	1.5%
2018	72,341	2,872	39,702	1.8%
2017	72,148	2,814	38,997	1.1%
2016	72,232	2,785	38,557	1.2%
2015	72,919	2,777	38,088	2.7%
2014	74,352	2,758	37,092	1.9%
2013	74,925	2,727	36,400	0.0%

The information above includes members in T-DROP. The schedule does not include retirees who return to work.

## Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Year	Estimated Number			Annual Allowance (Millions)	% Increase in Annual Allowance	Average Annual Allowances
	Added	Removed	Total Retirees			
<b>2023</b>	<b>3,389</b>	<b>1,491</b>	<b>54,646</b>	<b>\$1,346.62</b>	<b>4.1%</b>	<b>\$24,643</b>
2022	2,788	1,445	52,748	1,293.75	4.1%	24,527
2021	2,852	1,580	51,405	1,242.70	4.0%	24,175
2020	2,811	1,355	50,133	1,194.82	4.2%	23,833
2019	2,849	996	48,677	1,146.74	4.3%	23,558
2018	2,927	1,195	46,824	1,099.35	5.2%	23,478
2017	2,996	999	45,092	1,044.74	6.2%	23,169
2016	3,272	925	43,095	983.87	7.3%	22,830
2015	3,326	1,056	40,748	916.62	11.5%*	22,495
2014	3,156	932	38,478	822.19	7.7%	21,368

\* Increased percent due to T-DROP annuities included in 2015..

## Short Condition Test

ATRS' funding objective is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will **pay all promised benefits when due -- the ultimate test of financial soundness**. Testing for level contribution rates is the long-term test.

A **short condition test** is one means of checking a system's progress under its funding program. In a short condition test, the plan's present assets (cash and investments) are compared with: 1) member contributions on deposit; 2) the liabilities for future benefits to present retired lives; and 3) the liabilities for service already rendered by members. In a system that has been

following the discipline of level percent-of-payroll financing, the liabilities for member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by members (liability 3) will be partially covered by the remainder of present assets. The larger the funded portion of liability 3, the stronger the condition of the system. Liability 3 being fully funded is unusual, but highly desired.

The schedule below illustrates the history of Liability 3 of the System and is indicative of the ATRS' objective of following the discipline of level percent-of-payroll financing.

Val. Date June 30	(1) Member Contrib.	(2) Retirees and Benef.	(3) Active and Inactive Members (Employer Financed Portion)	Present Valuation Assets	Portion of Present Values Covered by Present Assets			
					(1)	(2)	(3)	Total
\$ Millions								
2014	1,077	8,777	7,456	13,375	100%	100%	47%	77%
2015	1,128	9,778	7,230	14,434	100%	100%	49%	80%
2016	1,184	10,430	7,198	15,239	100%	100%	50%	81%
2017#*	1,254	11,337	7,707	16,131	100%	100%	46%	79%
2018#	1,312	11,851	7,772	16,756	100%	100%	46%	80%
2019#	1,377	12,460	7,872	17,413	100%	100%	45%	80%
2020#	1,455	12,890	8,007	18,007	100%	100%	46%	81%
2021#*	1,544	13,596	8,847	19,343	100%	100%	48%	81%
2022#	1,648	14,044	9,005	20,328	100%	100%	51%	82%
<b>2023#</b>	<b>1,751</b>	<b>14,511</b>	<b>9,330</b>	<b>21,015</b>	<b>100%</b>	<b>100%</b>	<b>51%</b>	<b>82%</b>

\* Revised actuarial assumptions or methods.  
# Legislated benefit or contribution rate change.



## Actuarial Gain (Loss) by Risk Area

During the Period July 1, 2022 to June 30, 2023

Type of Risk Area	Gain (Loss) in Period	
	\$ Millions	Percent of Liabilities
<b>Economic Risk Areas</b>		
Pay increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	\$ (219.1)	(0.89)%
Gross Investment Return. If there is greater investment return recognition than assumed, there is a gain. If less return recognition, a loss.	(73.4)	(0.30)%
<b>Non-Economic Risk Areas</b>		
Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(1.8)	(0.01)%
Disability Retirements. If there are fewer disabilities than assumed, there is a gain. If more, a loss.	(0.5)	0.00 %
Death-in-Service Benefits. If there are fewer than assumed, there is a gain. If more, a loss.	0.0	0.00 %
Withdrawal. If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.	52.1	0.21 %
Death After Retirement. If there are more deaths than assumed, there is a gain. If fewer, a loss.	47.5	0.19 %
<b>Actuarial Gain (Loss) During Period</b>	<b>\$ (195.2)</b>	<b>(0.80)%</b>
<b>Beginning of Year Accrued Liabilities</b>	<b>\$ 24,697.5</b>	<b>100.0 %</b>

## Summary of Actuarial Assumptions and Methods

An actuarial valuation is based upon an actuarial cost method, an asset valuation method, and actuarial assumptions. These methods and assumptions are chosen by the Board of Trustees after consultation with the Actuary and other advisors.

The Entry Age Actuarial Cost Method of the valuation was used in determining accrued liabilities and normal cost. This method is consistent with the Board's level percent-of-payroll funding objective. With this method, the level percent-of-payroll is determined that will fund a member's retirement benefit over the member's entire working lifetime, from date of hire (Entry Age) to date of exit from the active member population. T-DROP members are treated as active members. Normal cost runs from the date of entry to the date of retirement. Differences in the past between assumed and actual experience become part of unfunded actuarial accrued liabilities and are amortized with level percent-of-payroll contributions. This cost method was first used in the **June 30, 1986** valuation.

The asset valuation method is a four-year smoothed market value method in which assumed investment return is recognized immediately each year and differences between actual and assumed investment return are phased-in over a closed four-year period. This asset valuation method is intended to give recognition to the long-term accuracy of market values while filtering out and dampening short-term market swings. This method was first used in the **June 30, 1995** valuation. It was modified following the 1997-2002 Experience Study to include an 80% - 120% market value corridor.

The actuarial assumptions used in producing the valuation fall into two broad classes: economic assumptions and demographic assumptions. Economic assumptions refer to long-term rates of investment return, wage growth, covered population growth, and inflation. Demographic assumptions refer to retirement rates, turnover rates, disability rates and mortality rates. The current assumptions are based upon a 2015-2020 study of experience of the Arkansas Teacher Retirement System. The assumptions are reviewed from time to time to keep them reasonably current with expected experience.

### Economic Assumptions

The **price inflation** assumption is 2.50%, although no specific Price Inflation is needed for this valuation. It is assumed that the 3% COLA will always be paid.

The **investment return rate** used in the valuation was 7.25% per year, compounded annually (net after administrative expenses). This rate was first used for the **June 30, 2021** valuation. The

assumed real rate of return over price inflation is 4.75%.

The **wage inflation** assumption is 2.75%. This consists of 2.50% related to pure price inflation and 0.25% related to general economic improvements. This assumption was first used for the **June 30, 2017** valuation.

**Pay increase assumptions** for individual active members are shown in Table VII. Part of the assumption for each service year is for a merit and/or seniority increase, and the other 2.75% recognizes wage inflation. These rates were first used for the **June 30, 2021** valuation.

The Active Member Group (Active, T-DROP, RTW) size is assumed to remain constant at its present level.

**Total active member payroll** is assumed to increase 2.75% a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. This rate was first used for the **June 30, 2017** valuation.

### Non-Economic Assumptions

The mortality tables used were the Pub-2010 General Healthy Retired, General Disabled Retiree and General Employee Mortality amount weighted tables for males and females. Mortality rates were adjusted for future mortality improvements using projection scale MP-2020 from 2010. Related values are shown in Table I. These tables were first used for the **June 30, 2021** valuation.

A limited fluctuation credibility procedure was used to determine the appropriate scaling factor of each gender and each member classification (see the 2015-2020 Experience Study), and are shown below:

	Scaling Factor
Healthy Male Retirees	105%
Healthy Female Retirees	105%
Disabled Male Retirees	104%
Disabled Female Retirees	104%
Male Active Members	100%
Female Active Members	100%

## Summary of Actuarial Assumptions and Methods (Continued)

**The probabilities of retirement** for members eligible to retire are shown in Tables II and III. The rates for full retirement and reduced retirement were first used in the **June 30, 2021** valuation.

**The assumed duration of T-DROP** for present T-DROP members is shown in Table IV.

**The probabilities of withdrawal from service, death-in-service and disability** are shown for sample ages in Tables V and VI. These rates were first used in the **June 30, 2021** valuation.

**The data about persons now covered and about present assets** was furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary. Members whose dates of birth were not supplied were assumed to be 40 years old on the valuation date. Members whose salaries were not supplied and that entered T-DROP were assumed to have the group average pay of those with salary data as of the valuation date that entered T-DROP.

## Table I | Single Life Retirement Values

Sample Attained Ages in 2023	Present Value of \$1.00 Monthly for Life		Present Value of \$1 Monthly for Life Increasing 3.0% Simple Annually		Future Life Expectancy (Years)		Percent Dying within Next Year	
	Male	Female	Male	Female	Male	Female	Male	Female
	40	\$159.96	\$162.49	\$213.47	\$218.30	\$45.36	\$48.37	0.09%
45	155.57	158.81	205.04	210.97	40.12	43.08	0.12%	0.07%
50	149.87	153.98	194.63	201.82	35.02	37.91	0.29%	0.22%
55	142.93	148.16	182.42	191.08	30.14	32.96	0.43%	0.30%
60	134.14	140.50	167.74	177.74	25.44	28.11	0.66%	0.42%
65	123.21	130.50	150.50	161.41	20.97	23.41	0.97%	0.62%
70	109.70	117.76	130.52	141.96	16.74	18.90	1.49%	0.99%
75	93.73	102.22	108.40	119.79	12.85	14.69	2.51%	1.75%
80	76.09	84.50	85.47	96.11	9.43	10.92	4.50%	3.24%
85	58.67	66.08	64.10	73.00	6.64	7.75	8.29%	6.17%
Base	2705 x 1.05	2706 x 1.05	2705 x 1.05	2706 x 1.05				
Projection	964	965	964	965				

\*Rates and life expectancies in future years are determined by the MP-2020 projection scale.

Age	Benefit Increasing 3.0% Simple Annually	Portion of Age 60 Lives Still Alive	
		Male	Female
60	\$100.00	100%	100%
65	115.00	96%	98%
70	130.00	91%	94%
75	145.00	84%	89%
80	160.00	73%	81%
Ref		2705 x 1.05	2706 x 1.05

## Table II | Probabilities of Retirement for Members

Retirement Ages	% of Active Participants Retiring with Unreduced Benefits			
	Education		Support	
	Male	Female	Male	Female
48	8%	7%	8%	8%
49	8%	7%	8%	8%
50	8%	7%	8%	8%
51	8%	7%	8%	8%
52	8%	7%	8%	8%
53	8%	7%	8%	8%
54	8%	7%	8%	8%
55	8%	8%	8%	8%
56	10%	8%	8%	8%
57	10%	10%	8%	11%
58	10%	12%	8%	11%
59	14%	15%	8%	15%
60	17%	18%	13%	15%
61	24%	20%	13%	16%
62	27%	29%	28%	26%
63	27%	26%	25%	20%
64	27%	28%	25%	24%
65	60%	57%	57%	59%
66	60%	57%	47%	49%
67	50%	42%	44%	40%
68	45%	42%	44%	40%
69	45%	42%	44%	40%
70	45%	42%	44%	40%
71	45%	42%	44%	40%
72	45%	42%	44%	40%
73	45%	42%	44%	40%
74	45%	42%	44%	40%
75	100%	100%	100%	100%
Ref	3245	3246	3247	3248

## Table III | Probabilities of Reduced Retirement for Members

Retirement Ages	% of Active Participants Retiring with Reduced Benefits			
	Education		Support	
	Male	Female	Male	Female
45	1.0%	1.0%	2.0%	3.0%
46	1.0%	1.0%	2.0%	3.0%
47	1.0%	1.0%	2.0%	3.0%
48	1.0%	1.0%	2.0%	3.0%
49	1.0%	1.0%	2.0%	3.0%
50	2.0%	2.0%	3.0%	4.0%
51	3.0%	2.0%	3.0%	4.0%
52	3.0%	3.0%	4.0%	4.0%
53	4.0%	4.0%	4.0%	4.0%
54	5.0%	4.0%	5.0%	4.0%
55	6.0%	5.0%	6.0%	4.0%
56	6.0%	5.0%	7.0%	6.0%
57	8.0%	5.0%	7.0%	6.0%
58	9.0%	6.0%	7.0%	6.0%
59	6.0%	6.0%	7.0%	6.0%
Ref	3249	3250	3251	3252

## Table IV | Duration of T-DROP for Members

Present T-DROP members are assumed to remain in T-DROP according to the following table:

Entry Age	Assumed Duration Years
50-56	7
57	6
58	5
59+	4

It was assumed that members will participate in the T-DROP to the extent that participating in the T-DROP would provide the highest value of benefits.

## Table V | Teachers Separations from Active Employment Before Age and Service Retirement

		Percent of Active Members Separating within the Next Year					
Sample Ages in 2023	Years of Service	Death*		Disability		Other	
		Male	Female	Male	Female	Male	Female
	0					17.00%	13.00%
	1					13.80%	11.30%
	2					11.30%	10.50%
	3					8.90%	8.30%
	4					6.30%	6.50%
25	5 & up	0.03%	0.01%	0.02%	0.02%	5.80%	6.50%
30		0.05%	0.02%	0.02%	0.02%	4.20%	4.80%
35		0.07%	0.03%	0.02%	0.03%	2.90%	3.20%
40		0.09%	0.04%	0.04%	0.07%	2.00%	2.10%
45		0.11%	0.06%	0.13%	0.17%	1.70%	1.70%
50		0.14%	0.08%	0.31%	0.37%	1.60%	1.70%
55		0.21%	0.12%	0.61%	0.63%	1.60%	1.70%
60		0.33%	0.19%	0.82%	0.89%	1.50%	1.60%
65		0.47%	0.28%	0.82%	0.89%	1.20%	1.30%
Ref		2723 x 1.00	2724 x 1.00	1217 x 1	1218 x 1	1364 1574	1365 1575

\*Rates and life expectancies in future years are determined by the MP-2020 projection scale.

## Table VI | Support Employees Separations from Active Employment Before Age and Service Retirement

		Percent of Active Members Separating within the Next Year					
Sample Ages in 2023	Years of Service	Death*		Disability		Other	
		Male	Female	Male	Female	Male	Female
	0					54.50%	48.50%
	1					29.90%	27.20%
	2					19.80%	19.00%
	3					15.50%	15.30%
	4					12.00%	12.80%
25	5 & up	0.03%	0.01%	0.02%	0.01%	10.60%	9.90%
30		0.05%	0.02%	0.05%	0.03%	7.80%	7.00%
35		0.07%	0.03%	0.10%	0.04%	5.70%	5.10%
40		0.09%	0.04%	0.13%	0.08%	4.40%	4.30%
45		0.11%	0.06%	0.21%	0.16%	3.70%	4.00%
50		0.14%	0.08%	0.45%	0.33%	3.50%	3.90%
55		0.21%	0.12%	0.88%	0.61%	3.50%	3.70%
60		0.33%	0.19%	1.36%	0.79%	3.40%	3.20%
65		0.47%	0.28%	1.36%	0.79%	2.70%	2.50%
Ref		2723 x 1.00	2724 x 1.00	1219 x 1	1220 x 1	1366 1576	1367 1577

\*Rates and life expectancies in future years are determined by the MP-2020 projection scale.



## Table VII | Individual Pay Increases

Education				Support			
Pay Increase Assumptions for an Individual Member				Pay Increase Assumptions for an Individual Member			
Years of Service	Merit & Seniority	Base (Economic)	Increase Next Year	Years of Service	Merit & Seniority	Base (Economic)	Increase Next Year
1	2.50%	2.75%	5.25%	1	3.00%	2.75%	5.75%
2	2.20%	2.75%	4.95%	2	2.60%	2.75%	5.35%
3	1.90%	2.75%	4.65%	3	1.60%	2.75%	4.35%
4	1.80%	2.75%	4.55%	4	1.45%	2.75%	4.20%
5	1.70%	2.75%	4.45%	5	1.35%	2.75%	4.10%
6	1.60%	2.75%	4.35%	6	1.25%	2.75%	4.00%
7	1.50%	2.75%	4.25%	7	1.20%	2.75%	3.95%
8	1.40%	2.75%	4.15%	8	1.15%	2.75%	3.90%
9	1.30%	2.75%	4.05%	9	1.10%	2.75%	3.85%
10	1.25%	2.75%	4.00%	10	1.05%	2.75%	3.80%
11	1.20%	2.75%	3.95%	11	1.00%	2.75%	3.75%
12	1.15%	2.75%	3.90%	12	0.95%	2.75%	3.70%
13	1.10%	2.75%	3.85%	13	0.90%	2.75%	3.65%
14	1.05%	2.75%	3.80%	14	0.80%	2.75%	3.55%
15	1.00%	2.75%	3.75%	15	0.75%	2.75%	3.50%
16	0.95%	2.75%	3.70%	16	0.70%	2.75%	3.45%
17	0.85%	2.75%	3.60%	17	0.65%	2.75%	3.40%
18	0.75%	2.75%	3.50%	18	0.60%	2.75%	3.35%
19	0.65%	2.75%	3.40%	19	0.50%	2.75%	3.25%
20	0.55%	2.75%	3.30%	20	0.45%	2.75%	3.20%
21	0.50%	2.75%	3.25%	21	0.40%	2.75%	3.15%
22	0.45%	2.75%	3.20%	22	0.35%	2.75%	3.10%
23	0.40%	2.75%	3.15%	23	0.30%	2.75%	3.05%
24	0.30%	2.75%	3.05%	24	0.25%	2.75%	3.00%
25	0.20%	2.75%	2.95%	25	0.25%	2.75%	3.00%
26	0.15%	2.75%	2.90%	26	0.25%	2.75%	3.00%
27	0.10%	2.75%	2.85%	27	0.25%	2.75%	3.00%
28	0.25%	2.75%	3.00%	28	0.40%	2.75%	3.15%
29+	0.00%	2.75%	2.75%	29+	0.00%	2.75%	2.75%
Ref	931			Ref	932		

## Comments

**General Financial Objective.** Section 24-7-401(a) of the Arkansas Code provides as follows (emphasis added):

"6.01. (1) The general financial objective of each Arkansas public employee retirement plan shall be to **establish and receive contributions which, expressed as percents of active member payroll, will remain approximately level from generation to generation of Arkansas citizens.** More specifically, contributions received each year shall be sufficient both to (i) fully cover the costs of benefit commitments being made to members for their service being rendered in such year and (ii) make a level payment which if paid annually over a reasonable period of future years will fully cover the unfunded costs of benefit commitments for service previously rendered...."

**Arkansas Teacher Retirement System Status:** Based upon the results of the June 30, 2023 actuarial valuations, **ATRS is satisfying the financial objective of level-contribution-percent financing.**

**The amortization period this year is 26 years,** unchanged from last year's period of 26 years. On a market value basis, the

amortization period is 30 years. While an amortization period of 26 years meets statutory requirements, the ATRS has targeted 18 years in recent legislation. The contribution rate based upon the target amortization period (18 years) would be approximately 17.2% of payroll.

**The Arkansas Teacher Retirement System remains stable with an 82.1% funded position** as of June 30, 2023. If experience is reasonably in line with expectations in Fiscal Year 2024, the amortization period is likely to increase in the next valuation due to the scheduled phase-in of net investment losses.

**The rate of investment return on a market value basis was 8.71%\*** this year. As of June 30, 2023, the actuarial value of assets exceeded the market value of assets by approximately \$340 million. Investment gains and losses that occur each year are smoothed in over a 4-year period. After considering smoothing, the recognized return this year was 6.88%, compared to an assumed 7.25% return for Fiscal Year 2023.

*\*This investment return figure was calculated by the actuary and may not exactly match your investment consultant's figure.*

## Statistics | Schedule of Retired Members by Type of Benefit

Monthly Benefit	No. of Retirees	Type of Retirement*					Option Selected#			
		1	2	3	4	5	Life	Opt. A	Opt. B	Opt. C
\$1-250	5,288	4,810	167	102	195	14	4,479	679	50	80
251-500	6,108	5,341	155	125	456	31	5,113	801	98	96
501-750	4,479	3,861	102	113	370	33	3,696	578	135	70
751-1,000	3,412	2,940	66	113	259	34	2,774	446	136	56
1,001-1,250	2,677	2,287	86	61	214	29	2,088	411	131	47
1,251-1,500	2,369	1,991	92	46	221	19	1,812	367	159	31
1,501-1,750	2,109	1,782	102	34	168	23	1,553	337	176	43
1,751-2,000	2,172	1,876	81	30	169	16	1,599	344	184	45
Over \$2,000	23,963	22,522	579	180	607	75	18,020	3,516	2,144	283
<b>Total</b>	<b>52,577</b>	<b>47,410</b>	<b>1,430</b>	<b>804</b>	<b>2,659</b>	<b>274</b>	<b>41,134</b>	<b>7,479</b>	<b>3,213</b>	<b>751</b>

\* Type of Retirement

1. Normal retirement for age and service
2. Survivor payment - normal or early retirement
3. Survivor payment - death-in-service
4. Disability retirement
5. Survivor payment - disability retirement

# Option Selected at Retirement

- Life - Straight life annuity
- Opt. A - 100% survivor annuity
- Opt. B - 50% survivor annuity
- Opt. C - annuity for 10 years certain and life thereafter

Excludes Act 793 and Act 808 retirees.

## Statistics | Schedule of Average Benefit Payments

Retirement Effective Dates		Service at Retirement						
		0-4#	5-9	10-14	15-19	20-24	25-29	30+
07/01/13 - 06/30/14	Average Monthly Benefit	\$ 144	\$ 294	\$ 626	\$ 1,034	\$ 1,481	\$ 2,553	\$ 3,195
	Average Final Salary	\$ 41,396	\$ 26,223	\$ 30,235	\$ 37,996	\$ 42,612	\$ 50,577	\$ 54,193
	Number of Active Retirees	42	497	472	336	358	1,060	122
07/01/14 - 06/30/15	Average Monthly Benefit	\$ 144	\$ 306	\$ 684	\$ 1,069	\$ 1,518	\$ 2,540	\$ 3,270
	Average Final Salary	\$ 40,803	\$ 27,540	\$ 32,878	\$ 38,857	\$ 44,433	\$ 52,059	\$ 56,908
	Number of Active Retirees	64	564	529	375	375	1,106	138
07/01/15 - 06/30/16	Average Monthly Benefit	\$ 112	\$ 293	\$ 669	\$ 1,064	\$ 1,466	\$ 2,522	\$ 3,490
	Average Final Salary	\$ 38,048	\$ 25,892	\$ 31,763	\$ 37,947	\$ 43,044	\$ 51,671	\$ 60,041
	Number of Active Retirees	48	494	600	389	387	1,122	109
07/01/16 - 06/30/17	Average Monthly Benefit	\$ 133	\$ 282	\$ 682	\$ 1,011	\$ 1,448	\$ 2,530	\$ 3,289
	Average Final Salary	\$ 38,412	\$ 25,606	\$ 31,940	\$ 36,516	\$ 42,814	\$ 52,510	\$ 57,847
	Number of Active Retirees	53	468	499	393	368	965	107
07/01/17 - 06/30/18	Average Monthly Benefit	\$ 150	\$ 284	\$ 681	\$ 1,099	\$ 1,587	\$ 2,548	\$ 3,105
	Average Final Salary	\$ 38,321	\$ 26,581	\$ 31,995	\$ 39,389	\$ 46,070	\$ 53,642	\$ 52,835
	Number of Active Retirees	62	496	486	375	346	965	113
07/01/18 - 06/30/19	Average Monthly Benefit	\$ 145	\$ 310	\$ 690	\$ 1,172	\$ 1,564	\$ 2,571	\$ 3,372
	Average Final Salary	\$ 38,105	\$ 29,390	\$ 32,619	\$ 40,560	\$ 45,151	\$ 53,701	\$ 60,369
	Number of Active Retirees	53	482	501	379	366	900	114
07/01/19 - 06/30/20	Average Monthly Benefit	\$ 120	\$ 284	\$ 637	\$ 1,104	\$ 1,533	\$ 2,577	\$ 3,108
	Average Final Salary	\$ 33,918	\$ 27,032	\$ 31,591	\$ 39,704	\$ 44,837	\$ 55,241	\$ 59,056
	Number of Active Retirees	47	464	496	365	320	882	139
07/01/20 - 06/30/21	Average Monthly Benefit	\$ 123	\$ 293	\$ 656	\$ 1,138	\$ 1,569	\$ 2,642	\$ 3,179
	Average Final Salary	\$ 33,575	\$ 27,101	\$ 31,717	\$ 39,886	\$ 44,936	\$ 55,249	\$ 58,864
	Number of Active Retirees	48	456	494	364	320	875	139
07/01/21 - 06/30/22	Average Monthly Benefit	\$ 126	\$ 306	\$ 708	\$ 1,060	\$ 1,565	\$ 2,638	\$ 3,287
	Average Final Salary	\$ 39,879	\$ 29,082	\$ 33,869	\$ 37,765	\$ 44,268	\$ 55,462	\$ 61,593
	Number of Active Retirees	53	438	398	352	342	1,001	131
07/01/22 - 06/30/23	Average Monthly Benefit	\$ 138	\$ 258	\$ 668	\$ 1,073	\$ 1,719	\$ 2,570	\$ 2,838
	Average Final Salary	\$ 42,352	\$ 25,857	\$ 33,325	\$ 37,730	\$ 47,389	\$ 56,197	\$ 55,728
	Number of Active Retirees	44	706	547	486	353	1,022	133

# May include cases where the service was not reported.

The figures in this chart are as of the year of retirement. They have not been updated for changes that occurred after retirement.

# Statistical



## Schedule of Revenue by Source

Year -Ending June 30,	Employer Contributions	% of Annual Covered Payroll	Member Contributions	Investment and Miscellaneous Income	Total
2011	\$ 400,330,902	14.70%	\$ 139,460,601	\$ 2,219,833,337	\$ 2,759,624,840
2012	398,822,946	16.30%	117,662,465	(118,654,190)	397,831,221
2013	400,933,872	14.30%	113,900,872	1,695,899,517	2,210,734,261
2014	404,920,441	14.20%	125,225,906	2,429,334,098	2,959,480,445
2015	408,230,472	14.21%	128,555,684	632,166,951	1,168,953,107
2016	410,358,229	14.21%	131,100,983	35,579,657	577,038,869
2017	414,954,939	14.20%	133,109,939	2,289,818,591	2,837,883,469
2018	424,488,126	14.22%	138,766,747	1,824,094,695	2,387,349,568
2019	430,864,656	14.23%	141,885,632	898,384,866	1,471,135,154
2020	446,228,128	14.50%	153,105,134	(165,763,064)	433,570,198
2021	472,567,147	14.75%	168,129,972	5,250,955,481	5,891,652,600
2022	501,522,604	15.10%	183,315,252	(1,082,845,164)	(398,007,308)
2023	536,619,031	15.37%	200,610,721	1,692,312,263	2,429,542,015

## Schedule of Expense by Type

Year -Ending June 30,	Benefit Payments	Refunds	Administrative and Other Expenses	Investment and Miscellaneous Income
2011	\$ 731,866,100	\$ 8,906,441	\$ 7,548,959	\$ 748,321,500
2012	791,844,923	9,225,151	7,752,975	808,823,049
2013	846,210,946	11,087,596	7,755,004	865,053,546
2014	914,250,015	10,485,103	8,034,235	932,769,353
2015	970,719,484	10,774,122	8,034,857	989,528,463
2016	1,035,958,950	10,145,471	8,059,030	1,054,163,451
2017	1,092,952,357	10,874,003	7,825,595	1,111,651,955
2018	1,160,738,237	9,455,405	9,336,430	1,179,530,072
2019	1,205,326,555	9,679,783	7,134,783	1,222,141,121
2020	1,255,065,794	9,592,091	8,457,862	1,273,115,747
2021	1,308,163,748	9,463,375	7,328,830	1,324,955,953
2022	1,374,220,915	10,426,792	6,650,448	1,391,298,155
2023	1,413,477,760	12,583,767	7,892,822	1,433,954,349

## Schedule of Benefit Expenses by Type

Type of Benefit	For The Year Ended June 30,									
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2015
Age and Service	\$ 1,183,189,280	\$ 1,135,131,535	\$ 1,092,814,070	\$ 1,046,397,991	\$ 1,008,092,044	\$ 958,281,765	\$ 907,314,702	\$ 852,695,640	\$ 795,518,171	\$ 795,518,171
Disability	40,457,469	40,631,115	40,710,587	40,420,225	40,330,710	39,770,821	38,833,696	37,812,689	36,188,748	36,188,748
Option	39,659,615	36,681,111	34,124,252	31,767,042	30,013,681	28,756,398	26,843,481	24,637,113	23,056,130	23,056,130
Survivor	12,949,173	12,527,408	12,129,985	11,555,653	11,267,137	10,848,118	10,470,562	9,946,290	9,626,726	9,626,726
Reciprocity	67,375,786	64,615,316	61,382,530	58,429,113	55,891,519	52,914,304	49,175,662	45,746,432	41,958,663	41,958,663
Active Members Death Benefits	396,423	681,421	487,669	338,189	278,972	304,927	474,719	357,921	404,248	404,248
T-DROP	47,464,578	64,370,804	48,309,780	47,978,202	41,550,591	44,827,681	42,969,143	52,760,622	50,656,897	50,656,897
Act 808	1,605,876	1,953,045	2,013,072	2,215,262	2,439,111	2,725,690	2,874,444	3,000,785	3,199,880	3,199,880
Cash Balance Disbursements	17,726,519	15,630,112	13,978,659	13,241,312	13,318,361	11,297,546	9,735,670	8,600,786	8,923,390	8,923,390
Cash and Savings Help Program	2,653,041	1,999,048	2,213,146	2,722,804	2,144,429	11,010,987	4,260,278	400,673	1,246,632	1,246,632
<b>Total</b>	<b>\$1,413,477,760</b>	<b>\$1,374,220,915</b>	<b>\$1,308,163,750</b>	<b>\$1,255,065,793</b>	<b>\$1,205,326,555</b>	<b>\$1,160,738,237</b>	<b>\$1,092,952,357</b>	<b>\$1,035,958,951</b>	<b>\$970,719,485</b>	<b>\$970,719,485</b>



## Participating Employers

Academics Plus Charter School	Armored School District	Concord School District
Alma School District	Ashdown School District	Conway Public Schools
Alpena School District	Atkins Public Schools	Conway Vocational Center
Apartment Department Of Workforce Services	Augusta Public Schools	Corning School District
Arch Ford Education Service Co-Op	Bald Knob Public Schools	Cossatot Community College - U Of A
Arkadelphia Public Schools	Barton-Lexa School District	Cossatot River School District
Arkansas Department Of Higher Education	Batesville School District	Cotter Public Schools
Arkansas Activities Association	Bauxite School District	County Line Public Schools
Arkansas Arts Academy Charter	Bay School District	Covenant Keepers Charter School
Arkansas Association Educational Administrators	Bearden School District	Cross County School District
Arkansas Connections Academy Charter	Beebe Public School District	Crossett School District
Arkansas Correctional School	Benton School District	Crowley'S Ridge Educational Service Co-Op
Arkansas Department Of Career Education (Rehab)	Bentonville Public Schools	Crowleys Ridge Technical Institute
Arkansas Department Of Career Education (Workforce)	Bergman Public Schools	Cutter Morning Star Public Schools
Arkansas Department Of Commerce	Berryville Public Schools	Danville Public Schools
Arkansas Department Of Education	Bismarck School District	Dardanelle Public Schools
Arkansas Department Of Education	Black River Technical College	Dawson Education Service Co-Op
Arkansas Department Of Health	Blevins School District	Decatur Public Schools
Arkansas Department Of Public Safety	Blytheville Public Schools	Deer/ Mt. Judea School District
Arkansas Easter Seals	Booneville School District	Dequeen Public Schools
Arkansas Economic Development Commission	Boston Mountain Educational Co-Op	Dequeen-Mena Education Service
Arkansas Educational Tv Network	Bradford School District	Dermott School District
Arkansas Northeastern College	Brinkley Public Schools	Des Arc School District
Arkansas River Education Service Co-Op	Brookland Public Schools	Dewitt School District
Arkansas School Boards Association	Bryant Public Schools	Dhs-Divison Of Youth Services
Arkansas School For Math, Sciences & Arts	Buffalo Island Central School District	Dierks Public Schools
Arkansas School For The Blind	Cabot Public Schools	Dollarway School District
Arkansas School For The Deaf	Caddo Hills School District	Dover School District
Arkansas State University	Calico Rock School District	Drew Central School District
Arkansas State University- Beebe	Camden-Fairview School District	Dumas Public Schools
Arkansas State University- Mid South Cc	Capital City Lighthouse Charter School	Earle School District
Arkansas State University- Mt. Home	Carlisle School District	East Arkansas Community College
Arkansas State University- Newport	Cave City School District	East End School District
Arkansas Teacher Retirement System	Cedar Ridge School District	East Poinsett County School District
Arkansas Tech University	Cedarville Public School District	Economics Arkansas
Arkansas Virtual Academy Charter	Centerpoint School District	El Dorado Public Schools
	Charleston Public Schools	Elkins School District
	Clarendon School District	Emerson-Taylor-Bradley School
	Clarksville School District	England Public School District
	Cleveland County School District	E-Stem Public Charter School
	Clinton Public Schools	Eureka Springs Public Schools
	College Of The Ouachitas	



## Participating Employers (Continued)

Exalt Academy Charter School	Henderson State University	Manila Public Schools
Farmington Public Schools	Hermitage Public School District	Mansfield School District
Fayetteville Public Schools	Highland Public School District	Marion School District
First Student	Hillcrest School District	Marked Tree School District
Flippin School District	Hope Academy Of Northwest Arkansas	Marmaduke School District
Fordyce Public Schools	Hope Public Schools	Marvell - Elaine School District
Foreman Public Schools	Horatio School District	Mayflower School District
Forrest City School District	Hot Springs School District	Maynard School District
Fort Smith Public Schools	Hoxie Public Schools	Mc Crory School District
Fouke School District	Huntsville School District	Mcgehee Public Schools
Fountain Lake School District	Imboden Area Charter School	Melbourne Public School District
Friendship Aspire - Southeast Pine Bluff	Izard County Consolidated School District	Mena Public Schools
Friendship Aspire Academy - Little Rock	Jackson County School District	Metropolitan Vocational Center
Friendship Aspire Academy - Pine Bluff	Jacksonville Lighthouse Charter School	Midland School District
Future School Of Ft. Smith Charter	Jacksonville North Pulaski School District	Mineral Springs School District
Genoa Central School District	Jasper School District	Monticello School District
Gentry Public Schools	Jessieville Public School District	Monticello Vocational Center
Glen Rose School District	Jonesboro Public Schools	Mount Ida Public Schools
Gosnell Public Schools	Jonesboro Vocational Center	Mountain Home Public Schools
Gravette School District	Junction City School District	Mountain Pine School District
Great Rivers Education Service Co-Op	Kipp Delta College Preparatory Charter	Mountain View School District
Green Forest Public Schools	Kirby School District	Mountainburg Public Schools
Greenbrier Public Schools	Lafayette County School District	Mt. Vernon-Enola School Distri
Greene County Tech School District	Lake Hamilton School District	Mulberry-Pleasant View Bi-County Public Schools
Greenland School District	Lakeside School District	Nashville School District
Greenwood School District	Lakeside School District	National Park Community College
Gurdon Public Schools	Lamar School District	Nemo Vista School District
Guy Fenter Education Service Co-Op	Lavaca Public Schools	Nettleton Public Schools
Guy-Perkins School District	Lawrence County School District	Nevada School District
Haas Hall Academy - Bentonville Charter	Lead Hill School District	Newport Special School District
Haas Hall Academy Charter - Fayetteville	Lee County School District	Norfolk School District
Hackett School District	Lincoln Consolidated School District	North Arkansas College
Hamburg School District	Lisa Academy Charter	North Central Career Center
Hampton School District	Little Rock Preparatory Academy	North Little Rock School District
Harmony Grove School District	Little Rock School District	Northcentral Arkansas Education Service Co-Op
Harmony Grove School District	Lonoke School District	Northeast Arkansas Education Co-Op
Harrisburg School District	Magazine School District	Northwest Arkansas Classical Academy Charter
Harrison School District	Magnet Cove School District	Northwest Arkansas Community College
Hazen School District	Magnolia School District	Northwest Arkansas Education Service Co-Op
Heber Springs School District	Malvern School District	
Hector School District	Mammoth Spring School District	
Helena-West Helena Schools		

## Participating Employers (Continued)

Northwest Technical Institute	Rivercrest School District	Trumann School District
Omaha School District	Riverside School District	Two Rivers School District
Osceola School District	Riverside Vocational Technical School	U Of A Community College - Batesville
Ouachita Public Schools	Riverview School District	U Of A Community College - Hope
Ouachita River School District	Rockbridge Montessori Charter School	U Of A Community College - Morrilton
Ozark Montessori Academy Charter - Springdale	Rogers Public Schools	University Of Arkansas - Fayetteville
Ozark Mountain School District	Rose Bud School District	University Of Arkansas - Fort Smith
Ozark Public Schools	Russellville School District	University Of Arkansas - Little Rock
Ozarka College	Salem School District	University Of Arkansas - Monticello
Ozarks Unlimited Resource Educational Service Co-Op	Scholarmade Achievement Place	University Of Arkansas - Pine Bluff
Palestine-Wheatley School District	Scranton School District	University Of Arkansas Cooperative Extension
Pangburn School District	Searcy County School District	University Of Arkansas For Medical Sciences
Paragould School District	Searcy School District	University Of Central Arkansas
Paris School District	Sheridan School District	Valley Springs Public Schools
Parkers Chapel School District	Shirley School District	Valley View Public Schools
Pea Ridge School District	Sia Tech Little Rock Charter	Van Buren School District
Perryville School District	Siloam Springs School District	Vilonia School District
Phillips Community College - Dewitt	Sloan-Hendrix School District	Viola School District
Phillips Community College -U Of A	Smackover-Norphlet School District	Waldron Public Schools
Piggott School District	South Arkansas Community College	Warren School District
Pine Bluff Lighthouse Charter School	South Arkansas Developmental Center	Warren Vocational Center
Pine Bluff School District	South Central Service Co-Op	Watson Chapel School District
Pocahontas Public Schools	South Conway County School District	West Fork School District
Pottsville School District	South Pike County School District	West Memphis School District
Poyen School District	Southeast Arkansas College	West Side School District
Prairie Grove School District	Southeast Arkansas Education Service Co-Op	Western Yell County School District
Premier High School Of Little Rock Charter	Southeast Arkansas Preparatory High School	Westside Consolidated School District
Premier High School Of North Little Rock Charter	Southern Arkansas University	Westside School District
Premier High School Of Springdale	Southern Arkansas University Tech	Westwind School For Performing Arts
Prescott Public Schools	Southside Bee Branch School District	White County Central Schools
Pulaski County Special School District	Southside School District	White Hall School District
Pulaski Technical College	Southwest Arkansas Education Co-Op	Wilbur D Mills Education Service Co-Op
Quest Middle Charter School - West Little Rock	Spring Hill School District	Wonderview School District
Quest Middle Charter School - Pine Bluff	Springdale Public Schools	Woodlawn School District
Quitman Public Schools	Star City School District	Wynne Public Schools
Rector School District	Strong-Huttig School District	Yellville-Summit Public School
Rich Mountain Community College	Stuttgart School District	
River Valley Career Academy	Texarkana Career And Technological Center	
	Texarkana School District	
	The Excel Center Charter At Goodwill	



Prepared by the Staff of

**ARKANSAS TEACHER RETIREMENT SYSTEM**

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